

CONTENT STANDARD 1

Students will understand that:	Students will be able to use this knowledge to:
<i>Productive resources are limited. Therefore, people can not have all the goods and services they want; as a result, they must choose some things and give up others.</i>	Identify what they gain and what they give up when they make choices.

Students face many choices every day. Is watching TV the best use of their time? Is working at a fast-food restaurant better than the best alternative job or some other use of their time? Identifying and systematically comparing alternatives enables people to make more informed decisions and to avoid unforeseen consequences of choices they or others make.

Some students believe that they can have all the goods and services they want from their family or from the government because goods provided by family or by governments are free. But this view is mistaken. Resources have alternative uses, even if parents or governments own them. For example, if a city uses land to build a football stadium, the best alternative use of that land must be given up. If additional funds are budgeted for police patrols, less money is available to hire more teachers. Explicitly comparing the value of alternative opportunities that are sacrificed in any choice enables citizens and their political representatives to weigh the alternatives in order to make better economic decisions. This analysis also makes people aware of the consequences of their actions for themselves and others, and leads to a heightened sense of responsibility and accountability.

BENCHMARKS

At the completion of Grade 4, students will know that:	At the completion of Grade 4, students will use this knowledge to:
<ol style="list-style-type: none"> 1. People make choices because they can't have everything they want. 2. Economic wants are desires that can be satisfied by consuming a good, service, or leisure activity. 3. Goods are objects that can satisfy people's wants. 4. Services are actions that can satisfy people's wants. 5. People's choices about what goods and services to buy and consume determine how resources will be used. 6. Whenever a choice is made, something is given up. 7. The opportunity cost of a choice is the value of the best alternative given up. 	<ol style="list-style-type: none"> 1. Identify some choices they have made and explain why they had to make a choice. 2. Match a list of wants with the correct example of a good, service or leisure activity that satisfies each want. 3. Create a collage representing goods that they or their families consume. 4. Create a collage representing services that they or their families consume. 5. Explain why a choice must be made, when given some land and a list of alternative uses for the land. 6. Choose a toy from a list of four toys and state what was given up. 7. Describe a situation that requires a choice, make a decision, and identify the opportunity cost.

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| <p>8. People whose wants are satisfied by using goods and services are called consumers.</p> <p>9. Productive resources are the natural resources, human resources, and capital goods available to make goods and services.</p> <p>10. Natural resources, such as land, are “gifts of nature;” they are present without human intervention.</p> <p>11. Human resources are the quantity and quality of human effort directed toward producing goods and services.</p> <p>12. Capital goods are goods that are produced and used to make other goods and services.</p> <p>13. Human capital refers to the quality of labor resources, which can be improved through investments in education, training, and health.</p> <p>14. Entrepreneurs are people who organize other productive resources to make goods and services.</p> <p>15. People who make goods and provide services are called producers.</p> | <p>8. Examine pictorial examples of people using goods and services and identify the goods and services being consumed.</p> <p>9. Identify examples of natural resources, human resources, and capital goods, used in the production of a given product.</p> <p>10. Use a resource map of this state to locate examples of natural resources.</p> <p>11. Draw pictures representing themselves as workers. Also, identify examples of human resources used in the production of education at their school.</p> <p>12. Draw a picture representing a capital good used at school. Also, identify examples of capital goods used to produce a good or service in their community.</p> <p>13. Give examples of how to improve their human capital. Explain how an athlete invests in his or her human capital.</p> <p>14. Select an entrepreneur and identify the productive resources the entrepreneur uses to produce a good or service.</p> <p>15. Identify producers of five different types of goods and five different types of services.</p> |
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<p>At the completion of Grade 8, students will know the Grade 4 benchmarks for this standard, and also that:</p>	<p>At the completion of Grade 8, students will use this knowledge to:</p>
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| <p>1. Scarcity is the condition of not being able to have all of the goods and services that one wants. It exists because human wants for goods and services exceed the quantity of goods and services that can be produced using all available resources.</p> <p>2. Like individuals, governments and societies experience scarcity because human wants exceed what can be made from all available resources.</p> | <p>1. Work in groups representing a scout troop that has volunteered to assist at a local nursing home on Saturday morning. The nursing home has a list of 30 possible projects, all of which it would like completed. Explain why all 30 projects cannot be completed on a Saturday morning.</p> <p>2. Role play a city council meeting called to allocate a budget of \$100,000. The council would like to buy four new police cars at \$25,000 each, repair two senior citizen centers at \$50,000 each, and build two new tennis courts at \$50,000 each. Explain why a choice must be made, decide how the city council should spend its money, describe the trade-offs made, and identify the opportunity cost of the decision.</p> |
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| <ul style="list-style-type: none"> 3. Choices involve trading off the expected value of one opportunity against the expected value of its best alternative. 4. The choices people make have both present and future consequences. 5. The evaluation of choices and opportunity costs is subjective; such evaluations differ across individuals and societies. | <ul style="list-style-type: none"> 3. Determine criteria for selecting a stereo and identify the trade-offs made when selecting one stereo over another. 4. Analyze the consequences of choosing not to study for a final exam and identify when those consequences occur. 5. Individually develop a solution to a problem that affects everybody in the class and identify the opportunity cost. Compare the solutions and explain why solutions and opportunity costs differ among students. |
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At the completion of **Grade 12**, students will know the Grade 4 and Grade 8 benchmarks for this standard.

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| <ul style="list-style-type: none"> 1. Choices made by individuals, firms, or government officials often have long run unintended consequences that can partially or entirely offset the initial effects of the decision. | <ul style="list-style-type: none"> 1. Explain how a high school senior's decision to work 20 hours per week during the school year could reduce her lifetime income. Also, explain how an increase in the legal minimum wage aimed at improving the financial condition of some low income families could reduce the income of some minimum wage earners. |
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CONTENT STANDARD 2

Students will understand that:	Students will be able to use this knowledge to:
<i>Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Most choices involve doing a little more or a little less of something: few choices are “all or nothing” decisions.</i>	Make effective decisions as consumers, producers, savers, investors, and citizens.

To make decisions that provide the greatest possible return from the resources available, people and organizations must weigh the benefits and costs of using their resources to do a little more of some things, and little less of others. For example, to use their time effectively, students must weigh the additional benefits and costs of spending another hour studying economics rather than listening to music or talking with friends. School officials must decide whether to use some of its funds to buy more books for the library, more helmets for the football team, or more equipment for teachers to use in their classrooms. Company managers and directors must choose which products to make and whether to increase or decrease the amount they produce. The President, Congress, and other government officials must decide which public spending programs to increase, and which to decrease.

Focusing on changes in benefits and comparing them to changes in costs is a way of thinking that distinguishes economics from most social sciences. In applying this approach, students should realize that it is impossible to alter how resources were used in the past. Instead, past decisions only establish the starting points for current decisions about whether to increase, decrease, or leave unchanged resource levels devoted to different activities.

BENCHMARKS

At the completion of Grade 4, students will know that:	At the completion of Grade 4, students will use this knowledge to:
<ol style="list-style-type: none"> 1. Few choices are all-or-nothing decisions; they usually involve getting a little more of one thing by giving up a little of something else. 2. A cost is what you give up when you decide to do something. 3. A benefit is what satisfies your wants. 	<ol style="list-style-type: none"> 1. Analyze how to divide their time on a Saturday afternoon when the possibilities are raking leaves to earn money, going roller skating with friends, and shopping at the mall with their aunt. Students will identify the possible uses of their time and explain how devoting more time to one activity leaves less time for another. 2. List the costs of buying and caring for a pet. 3. List the benefits of buying and caring for a pet.

At the completion of Grade 8 , students will know the Grade 4 benchmarks for this standard, and also that:	At the completion of Grade 8 , students will use this knowledge to:
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1. To determine the best level of consumption of a product, people must compare the additional benefits with the additional costs of consuming a little more or a little less.

1. Solve the following problem: Your grandmother give you \$30 for your birthday and you are trying to decide how to spend it. You are considering buying compact disks (\$12 each), going to the movies (\$5 per ticket), or taking some friends out for pizza (\$7.50 per person). You do not have to spend all your money on one thing. You can use some money for one thing, and some for another. How would you spend your money to get the greatest satisfaction?

At the completion of Grade 12 , students will know the Grade 4 and 8 benchmarks for this standard, and also that:	At the completion of Grade 12 , students will use this knowledge to:
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1. Marginal benefit is the change in total benefit resulting from an action. Marginal cost is the change in total cost resulting from an action.
2. As long as the marginal benefit of an activity exceeds the marginal cost, people are better off doing more of it; when the marginal cost exceeds the marginal benefit, they are better off doing less of it.
3. To produce the profit-maximizing level of output and hire the optimal number of workers, and other resources, producers must compare the marginal benefits and marginal costs of producing a little more with the marginal benefits and marginal costs of producing a little less.
4. To determine the optimal level of a public policy program, voters and government officials must compare the marginal benefits and marginal costs of providing a little more of a little less of the program's services.

1. Explain why beyond some point they are unwilling to buy and consume an additional slice of pizza.
2. Apply the concepts of marginal benefit and marginal cost to an environmental policy to find the optimal amount of pollution for two firms that have substantially different costs of reducing pollution.
3. Decide how many workers to hire for a profit-maximizing car wash by comparing the cost of hiring each additional worker to the additional revenues derived from hiring each additional worker.
4. Use the concepts of marginal cost and marginal benefit to evaluate proposals for a pollution control ordinance aimed at maximizing economic efficiency; then select the best proposal, and explain why it seems best.

CONTENT STANDARD 3

Students will understand that:	Students will be able to use this knowledge to:
<p><i>Different methods can be used to allocate goods and services. People acting individually or collectively through government, must choose which methods to use to allocate different kinds of goods and services.</i></p>	<p>Evaluate different methods of allocating goods and services, by comparing the benefits and costs of each method.</p>

Individuals and organizations routinely use different decision-making systems to determine what should be produced, how it should be produced, and who will consume it. Most high school students already understand the major advantages and disadvantages of selling concert tickets using a first-come-first-served system, rather than a lottery to select from among those who applied for tickets. Unfortunately, many students have experienced the use of force to allocate resources on the school playground. Students also know that families typically use authoritarian systems to decide how resources are used — Mom and Dad decide.

The American economy uses a market system to make many allocation decisions, and it is important for students to understand why the market system is used so extensively. Students also should be able to compare the characteristics of a market system with alternatives used more extensively in some other countries. With this understanding, students can assess the benefits and costs of alternative allocation systems when discussing difficult questions such as how incomes should be divided among people or who should receive a kidney transplant and who should not.

BENCHMARKS

At the completion of Grade 4 , students will know that:	At the completion of Grade 4 , students will use this knowledge to:
<ol style="list-style-type: none"> 1. No method of distributing goods and services can satisfy all wants. 2. There are different ways to distribute goods and services (by prices, command, majority rule, contests, force, first-come/first-served, sharing equally, lottery, personal characteristics, and others), and there are advantages and disadvantages to each. 	<ol style="list-style-type: none"> 1. Generate different methods of allocating student time on classroom computers, tell who gains and who loses with each distribution method, and conclude that no distribution method satisfies all wants. 2. Compare the advantages and disadvantages of different methods of allocating various goods and services, such as cookies, houses, student time on playground equipment at recess, elective class offices, military service in times of war or peace, and athletic championships.

<p>At the completion of Grade 8, students will know the Grade 4 benchmarks for this standard, and also that:</p>	<p>At the completion of Grade 8, students will use this knowledge to:</p>
<ol style="list-style-type: none"> 1. Scarcity requires the use of some distribution method, whether the method is selected explicitly or not. 2. There are essential differences between a market economy, in which allocations result from individuals making decisions as buyers and sellers, and a command economy, in which resources are allocated according to central authority. 3. People in all economies must address three questions: What goods and services will be produced? How will these goods and services be produced? Who will consume them? 4. National economies vary in the extent to which they rely on government directives (central planning) and signals from private markets (prices) to allocate scarce goods, services, and productive resources. 5. As consumers, people use resources in different ways to satisfy different wants. Productive resources can be used in different ways to produce different goods and services. 	<ol style="list-style-type: none"> 1. Describe the distribution methods used to allocate a variety of goods and services, such as, parking spaces, prison paroles, access to a new drug treatment for cancer, seats on a bus, milk, and tickets to a popular art exhibits. Then explain why a distribution method is necessary. 2. Compare the methods used to allocate work responsibilities in homes with those used to allocate work responsibilities in business. Also, compare the advantages and disadvantages of economic systems used in different countries and at different times, using as criteria broad social goals such as freedom, efficiency, fairness, and growth. 3. Answer the three economic questions while producing a simple classroom product, such as your bracelets, greeting cards, or decorations for a school dance. 4. Compare the relative size and responsibilities of government in several countries. 5. List the resources used to produce some item and identify other items that could have been made from these resources.

<p>At the completion of Grade 12, students will know the Grade 4 and 8 benchmarks for this standard, and also that:</p>	<p>At the completion of Grade 12, students will use this knowledge to:</p>
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<ol style="list-style-type: none"> 1. Comparing the benefits and costs of different allocation methods in order to choose the method that is most appropriate for some specific problem can result in more effective allocations and a more effective overall allocation system. 	<ol style="list-style-type: none"> 1. Examine economic systems used in different countries, select the one that provides the most effective method for allocating resources, and explain why this method is effective. Also, assess the effectiveness of various systems for allocating organ transplants, hunting and fishing licenses, elective offices, time with a parent, and access to hospital maternity facilities.
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CONTENT STANDARD 4

Students will understand that:	Students will be able to use this knowledge to:
<i>People respond predictably to positive and negative incentives.</i>	Identify incentives that affect people’s behavior and explain how incentives affect their own behavior.

Economic incentives are the additional rewards or penalties people receive from engaging in more or less of a particular activity. Understanding rewards and penalties helps people to make the choices they need to make in order to achieve their goals. Prices, wages, profits, subsidies, and taxes are common economic incentives. Subsidizing an activity usually leads to more of it being provided; taxing or penalizing an activity usually leads to less of it being provided.

People frequently have good reasons to influence the behavior of others. For example, businesses try to encourage people to buy more of their products, workers try to persuade employers to hire them and to pay them higher wages, and governments try to induce the production and consumption of some products and discourage the production and consumption of others. To understand or predict behavior of people or organizations, students must understand the economic incentives these people or organizations face.

BENCHMARKS

At the completion of Grade 4, students will know that:	At the completion of Grade 4, students will use this knowledge to:
<ol style="list-style-type: none"> 1. Rewards are positive incentives that make people better off. 2. Penalties are negative incentives that make people worse off 3. Both positive and negative incentives affect people’s choices and behavior. 4. People’s views of rewards and penalties differ because people have different values. Therefore, an incentive can influence different individuals in different ways. 	<ol style="list-style-type: none"> 1. List examples of rewards that are incentives for positive classroom behavior. 2. List examples of penalties or negative incentives that discourage inappropriate behavior at home. 3. Identify examples of incentives and categorize them as positive or negative. 4. Identify the incentives that would encourage them to read a book, to return their library books on time, to repay money they borrow from the school cafeteria for lunch, and to complete their homework assignments on time; explain why various students respond differently to incentives to do these things. Also, explain why some students will do extra-credit work and some will not.

At the completion of Grade 8 , students will know the Grade 4 benchmarks for this standard, and also that:	At the completion of Grade 8 , students will use this knowledge to:
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1. Responses to incentives are predictable because people usually pursue their self-interest.
2. Changes in incentives cause people to change their behavior in predictable ways.
3. Incentives can be monetary or non-monetary.

1. Explain why they would be willing to shovel snow when temperatures are below freezing, mow lawns when their friends are going to a movie, or babysit on a weekend evening instead of going with friends to a dance.
2. Predict how students' study habits will change if the grading system changes from letter grades to pass/fail to no grades.
3. Identify the monetary and non-monetary incentives related to taking a driver's education class.

At the completion of Grade 12 , students will know the Grade 4 and 8 benchmarks for this standard, and also that:	At the completion of Grade 12 , students will use this knowledge to:
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1. Acting as consumers, producers, workers, savers, investors, and citizens, people respond to incentives in order to allocate their scarce resources in ways that provide the highest possible returns to them.
2. Small and large firms, labor unions and educational, and other not-for-profit organizations have different goals and face different rules and constraints. These goals, rules, and constraints influence the benefits and costs of those who work with or for those organizations, and, therefore, their behavior.

1. Analyze the impact (on consumers, producers, workers, savers, and investors) of an increase in the minimum wage, a new tax policy, or a change in interest rates.
2. Compare and contrast the incentives an individual might face in serving as an elected official, the owner of a small business, the president of a large company, and the director of a local United Way office.

CONTENT STANDARD 5

Students will understand that:	Students will be able to use this knowledge to:
<p><i>Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations.</i></p>	<p>Negotiate exchanges and identify the gains to themselves and others. Compare the benefits and costs of policies that alter trade barriers between nations, such as tariffs and quotas.</p>

As a result of their competitive experiences in sports and games, students usually have learned to expect that, in most contests when one person or team wins, another person or team must lose. Voluntary exchanges, on the other hand, are cooperative activities in which both sides expect to gain, and both usually do. Because all of the parties to a voluntary exchange expect to gain from trade, institutions that make trading easier usually improve social welfare.

Understanding the win-win nature of voluntary exchange helps students learn that people and organizations trade with one another only when each party offers something that the other party values more than whatever he or she has to trade. For example, an employer will hire a student at a wage rate of \$6 per hour only if the employer expects to receive labor services from the student that are worth at least that much. And the student will voluntarily work for \$6 per hour only if the student values the \$6 more than the best alternative use of his or her time. The principle that voluntary trade can improve each participant’s situation applies to all voluntary exchanges, including trade between people or organizations in different parts of the same country, or among people or organizations in different countries.

BENCHMARKS

<p>At the completion of Grade 4, students will know that:</p> <ol style="list-style-type: none"> 1. Exchange is trading goods and services with people for other goods and services or for money. 2. The oldest form of exchange is barter — the direct trading of goods and services between people. 3. People voluntarily exchange goods and services because they expect to be better off after the exchange. 	<p>At the completion of Grade 4, students will use this knowledge to:</p> <ol style="list-style-type: none"> 1. Identify exchanges they have made and tell whether they were monetary or barter exchanges. 2. Identify current and historical examples of barter exchanges. 3. Describe a trade they have made, such as one with baseball cards, stickers, or lunch desserts, and explain why they agreed to trade.
<p>At the completion of Grade 8, students will know the Grade 4 benchmarks for this standard, and also that:</p> <ol style="list-style-type: none"> 1. When people buy something, they value it more than it costs them; when people sell something, they value it less than the payment they receive. 	<p>At the completion of Grade 8, students will use this knowledge to:</p> <ol style="list-style-type: none"> 1. Describe recent monetary transactions they have made; as buyer or sellers. Explain why they were willing to trade.

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| <ul style="list-style-type: none"> 2. Free trade increases worldwide material standards of living. 3. Despite the mutual benefits from trade among people in different countries, many nations employ trade barriers to restrict free trade for national defense reasons or because some companies and workers are hurt by free trade. 4. Imports are foreign goods and services that are purchased from sellers in other nations. 5. Exports are domestic goods and services that are sold to buyers in other nations. 6. Voluntary exchange among people or organizations in different countries gives people a broader range of choices in buying goods and services. | <ul style="list-style-type: none"> 2. Identify the benefits when a trade barrier such as sugar or automobile import quotas is eliminated. 3. Look at historical examples of periods when the United States has imposed trade barriers and explain why U.S. citizens would impose trade barriers given the mutual benefits of free trade. 4. Examine labels of products in their homes and compile a list of imported products and the countries from which they are imported. 5. Determine what major products are produced in their community for export and to the countries to which they are exported. 6. Describe how their daily lives would be different if people in the United States did not trade with people in other countries. |
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<p>At the completion of Grade 12, students will know the Grade 4 and 8 benchmarks for this standard, and also that:</p>	<p>At the completion of Grade 12, students will use this knowledge to:</p>
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| <ul style="list-style-type: none"> 1. A nation pays for its imports with its exports. 2. When imports are restricted by public policies, consumers pay higher prices and job opportunities and profits in exporting firms decrease. | <ul style="list-style-type: none"> 1. Participate in a trading simulation where students represent different countries with specific goods to sell and specific goods they want to buy; conclude that a nation pays for its imports with its exports, or by borrowing. 2. Analyze the political and economic implications of a proposed ban on imported televisions. |
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CONTENT STANDARD 6

Students will understand that:	Students will be able to use this knowledge to:
<i>When individuals, regions, and nations specialize in what they can produce at the lowest cost and then trade with others, both production and consumption increase.</i>	Explain how they can benefit themselves and others by developing special skills and strengths.

Everyone specializes to some degree, and everyone depends on others to produce many of the things he or she consumes. As future producers and workers, students should understand that they will earn more by specializing in doing the things they can do well and that entail the least sacrifice in forgone opportunities. They also should understand that specialization can lead to increased production, even when everyone has similar skills and resources, because concentrating production of some goods or services in one location can sometimes reduce production costs.

This understanding will help students appreciate why an economy in which people specialize and trade voluntarily with one another results in higher overall levels of production and consumption, for individuals, regions, and nations.

BENCHMARKS

At the completion of Grade 4 , students will know that:	At the completion of Grade 4 , students will use this knowledge to:
<ol style="list-style-type: none"> 1. Economic specialization occurs when people concentrate their production on fewer kinds of goods and services than they consume. 2. Division of labor occurs when the production of a good is broken down into numerous separate tasks, with different workers performing each task. 3. Specialization and division of labor usually increase the productivity of workers. 4. Greater specialization leads to increasing interdependence among producers and consumers. 	<ol style="list-style-type: none"> 1. Name several adults in the school or community who specialize in the production of a good or service (e.g., baker, law enforcement officer, teacher, etc.) and identify other goods and services that these individuals consume but do not produce for themselves. 2. Participate in a simulated assembly line and identify the separate operations and the different tasks involved. 3. Work individually to produce a product and then work as a member of a small group to produce the same product. Explain why more goods usually are produced when each member of the group performs a particular task in making the good. 4. Compare the extent of specialization and interdependence of a shipwrecked sailor living on an isolated Pacific island with a family that owns a cattle ranch in New Mexico.

<p>At the completion of Grade 8, students will know the Grade 4 benchmarks for this standard, and also that:</p>	<p>At the completion of Grade 8, students will use this knowledge to:</p>
<ol style="list-style-type: none"> 1. Labor productivity is output per worker. 2. Like trade among individuals within one country, international trade promotes specialization and division of labor and increases output and consumption. 3. As a result of growing international economic interdependence, economic conditions and policies in one nation increasingly affect economic conditions and policies in other nations. 	<ol style="list-style-type: none"> 1. Produce a product using an assembly line process and compute output per worker. 2. Explain why Canada produces relatively more ice hockey players and the United States produces relatively more baseball players. 3. Explain how a tariff on imported cacao beans affects the production of chocolate candy in the United States and how it affects people in cacao- growing countries. Also, analyze data on the kinds and value of goods that Japan, Canada, Mexico, and Germany export to the United States and predict the likely effect of a recession in the United States on the economies of these countries.
<p>At the completion of Grade 12, students will know the Grade 4 and 8 benchmarks for this standard, and also that:</p>	<p>At the completion of Grade 12, students will use this knowledge to:</p>
<ol style="list-style-type: none"> 1. Two factors that prompt international trade are international differences in the availability of productive resources and differences in relative prices. 2. Transaction costs are costs (other than price) that are associated with the purchase of a good or service. When transaction costs decrease, trade increases. 3. Individuals and nations have a comparative advantage in the production of goods or services if they can produce a product at a lower opportunity cost than other individuals or nations. 	<ol style="list-style-type: none"> 1. Name three things, such as bananas, coffee and Eucalyptus oil, that could be produced in the continental United States, although production would be very costly, and explain in terms of opportunity costs why the United States is probably better off importing such goods. 2. Identify transaction costs associated with the purchase of a good or service. Also, explain why each of the following encourages exchange: (1) more efficient trucks can carry larger loads for the same fuel costs; (2) automated teller machines; (3) credit cards; and (4) classified advertising. 3. Apply the concepts of opportunity cost and comparative advantage to the following problem: The Netherlands can produce in one day either four drill presses or eight embroidered tablecloths. Using the same amount of resources, Portugal can produce either two drill presses or seven embroidered tablecloths. Which country should specialize in drill presses and import tablecloths, and why? Which country should specialize in table cloths and import drill presses, and why?

4. Comparative advantages change over time because of changes in factor endowments, resource prices, and events that occur in other nations.
4. Explain why the United States no longer has a comparative advantage in the production of shoes.

CONTENT STANDARD 7

Students will understand that:	Students will be able to use this knowledge to:
<p><i>Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.</i></p>	<p>Identify markets in which they have participated as a buyer and as a seller and describe how the interaction of all buyers and sellers influences prices. Also, predict how prices change when there is either a shortage or surplus of the product available.</p>

In market economies there is no central planning agency that decides how many different kinds of sandwiches are provided for lunch every day at restaurants and stores, how many loaves of bread are baked, how many toys are produced before the holidays, or what the prices will be for the sandwiches, bread, and toys. Students should understand that, instead, most prices in market economies are established by the interaction between buyers and sellers.

Understanding how market prices and output levels are determined helps people anticipate market opportunities and make better choices as consumers and producers. It will also help them realize that market allocations are impersonal.

BENCHMARKS

At the completion of Grade 4 , students will know that:	At the completion of Grade 4 , students will use this knowledge to:
<ol style="list-style-type: none"> 1. A price is what people pay when they buy a good or service, and what they receive when they sell a good or service. 2. A market exists whenever buyers and sellers exchange goods and services. 3. Most people produce and consume. As producers they make goods and services; as consumers they use goods and services. 	<ol style="list-style-type: none"> 1. Identify prices they have paid for a hamburger, french fries, and a soda, and prices they have received for selling lemonade, feeding a neighbor's pet while its owner is on vacation, or doing certain household chores. 2. Give examples of markets in which buyers and sellers meet face-to-face and other markets in which buyers and sellers never meet. 3. Identify people who are acting as consumers and provide examples of situations in which the students were consumers of goods and services. Identify people who are acting as producers, and provide examples of situations in which the students produced goods and services.

At the completion of Grade 8 , students will know the Grade 4 benchmarks for this standard, and also that:	At the completion of Grade 8 , students will use this knowledge to:
<ol style="list-style-type: none"> 1. Market prices are determined through the buying and selling decisions made by buyers and sellers. 	<ol style="list-style-type: none"> 1. Play a market game in which buyers and sellers determine the market price for a common product, for example. wheat, apples, baseballs.

2. Relative prices refers to the price of one good or service compared to the prices of other goods and services. Relative prices are the basic measures of the relative scarcity of products when prices are set by market forces (supply and demand).
3. The market clearing or equilibrium price for a good or service is the one price at which quantity supplied equals quantity demanded.
4. If a price is above the market clearing price, it will fall, causing sellers to produce less and buyers to purchase more; if it is below the market clearing price, it will rise, causing sellers to produce more and buyers to purchase less.
5. An exchange rate is the price of one nation's currency in terms of another nations currency. Like other prices, exchange rates are determined by the forces of supply and demand. Foreign exchange markets allocate international currencies.
2. Explain in terms of relative scarcity why people are willing to pay higher prices for diamonds than for water, even though water is necessary for life and diamonds are not.
3. Determine the market clearing price when given a supply schedule and a demand schedule for compact disks.
4. Identify examples of products for which the price fell because sellers were unable to sell all they had produced; identify examples of other products for which the price rose because consumers wanted to buy more than producers were producing.
5. Calculate the following: (1) If the British pound is worth \$1.42. How much would you have to pay in England for a compact disk that is worth \$16.00? (2) If the Canadian dollar is equal to \$.72 in American money. What is the Canadian equivalent of \$15.00 American? (3) If it takes 1372 Italian lira to buy \$1.00. How much is an Italian sweater purchased for 27,000 lira in American dollars?

At the completion of **Grade 12**, students will know the Grade 4 and 8 benchmarks for this standard, and also that:

At the completion of **Grade 12**, students will use this knowledge to:

1. A shortage occurs when buyers want to purchase more than producers want to sell at the prevailing price.
2. A surplus occurs when producers want to sell more than buyers want to purchase at the prevailing price.
3. Shortages of a product usually result in price increases in a market economy; surpluses usually result in price decreases.
1. Explain why there is usually a shortage of batteries in areas where forecasters predict a hurricane and why apple bins in grocery stores are empty when disease has destroyed half of the Washington apple crop.
2. Explain why there is often a late-season surplus of tickets available for the home contests of a baseball team that loses most of its games.
3. Explain what happened (and why) to the price of tickets to sporting events purchased from scalpers when many more people want to attend those events than the number of seats in the stadium or arena. Also, explain what will happen to the price of a rare misprinted stamp if the postal service prints another 100,000 stamps in the same way.

4. When the exchange rate between two currencies changes, the relative prices of the goods and services traded among countries using those currencies change; as a result, some groups gain and others lose.
4. Use the following scenarios to analyze the effects on trade of a change in exchange rates: In one year, the American dollar equaled 250 Japanese yen; in the following year, the American dollar equaled 150 yen; and in the third year, it equaled 200 yen. If a Nikon camera costs 75,000 yen and Sony Walkman radio costs 25,000 yen: (1) What will be the price in dollars of these two products in each year for an American? (2) Will an American want to buy more or fewer Japanese products in year one, in year two, and in year three? Explain.

CONTENT STANDARD 8

Students will understand that:	Students will be able to use this knowledge:
<i>Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives.</i>	Predict how prices change when the number of buyers or sellers in a market changes, and explain how the incentives facing individual buyers and sellers are affected.

Understanding the role of prices as signals and incentives helps people anticipate market opportunities and make better choices as producers and consumers. It also helps citizens understand the consequences and weigh the costs and benefits of price controls, such as minimum-wage laws and rent ceilings, that set legal minimum or maximum prices and result in sustained surpluses or shortages.

BENCHMARKS

At the completion of Grade 4, students will know that:	At the completion of Grade 4, students will use this knowledge to:
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| <ol style="list-style-type: none"> 1. High prices for a good or service provide incentives for buyers to purchase less of that good or service, and for producers to make or sell more of it. Lower prices for a good or service provide incentives for buyers to purchase more of that good or service, and for producers to make or sell less of it. | <ol style="list-style-type: none"> 1. Predict how consumers would react if the price of pencils rose to \$10 each (and explain the prediction). Predict how they would react if the price fell to \$.01 each (and explain the prediction). Explain how producers would react in each situation. |
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At the completion of Grade 8, students will know that:	At the completion of Grade 8, students will use this knowledge to:
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| <ol style="list-style-type: none"> 1. An increase in the price of a good or service encourages people to look for substitutes, causing the quantity demanded to decrease, and vice versa. This relationship between price and quantity demanded, known as the law of demand, exists as long as other factors influencing demand do not change. 2. An increase in the price of a good or service enables producers to cover higher per-unit costs, causing the quantity supplied to increase, and vice versa. This relationship between price and quantity supplied is normally true as long as other factors influencing costs of production and supply do not change. 3. Markets are interrelated; changes in the price of one good or service can lead to changes in prices of many other goods and services. | <ol style="list-style-type: none"> 1. Survey students in other classes at school regarding how many glasses of orange juice students would be willing and able to buy at various prices. Analyze the data to show the relationship between price and quantity demanded. Identify the substitutes students use when the price is higher. 2. State the number of push ups they would be willing and able to supply at various prices. State a generalization about the relationship between price, cost, and quantity supplied from the data. 3. Explain how a decrease in the price of VCRs can cause a decrease in the price of popcorn at movie theaters. |
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4. Scarce goods and services are allocated in a market economy through the influence of prices on production and consumption decisions.

4. Use flowcharts to illustrate the decisions of producers and consumers when the price of peanuts rises and when the price of oil falls, and explains why producers and consumers behave in this way.

At the completion of **Grade 12**, students will know the Grade 4 and 8 benchmarks for this standard, and also that:

1. Demand for a product changes when there is a change in consumers' incomes or preferences, or in the prices of related goods or services, or in the number of consumers in a market.
2. Supply of a product changes when there are changes in either the prices of the productive resources used to make the good or service, the technology used to make the good or service, the profit opportunities available to producers by selling other goods or services, or the number of sellers in a market.
3. Changes in supply or demand cause relative prices to change; in turn, buyers and sellers adjust their purchase and sales decisions.
4. Government-enforced price ceilings set below the market-clearing price and government-enforced price floors set above the market-clearing price distort price signals and incentives to producers and consumers. The price ceilings cause persistent shortages, while the price floors cause persistent surpluses.

At the completion of **Grade 12**, students will use this knowledge to:

1. Predict the change in demand for a particular brand of jeans when an extensive ad campaign for the brand targets teenagers, their allowances double, the price of corduroy pants skyrockets, or jeans become a popular item among adults.
2. Predict the changes in supply and market price for domestic cars when the cost of labor increases, more robotics are used to produce cars, the prices of domestic utility vehicles rise, or when the number of imported vans increases.
3. Identify products that have become more or less expensive compared to other products as a result of changes in supply and demand and explain how the price changes affected production and consumption decisions.
4. Describe what is likely to happen if the government imposes a binding price ceiling on gasoline and a binding price floor on milk.

CONTENT STANDARD 9

Students will understand that:	Students will be able to use this knowledge to:
<p><i>Competition among sellers lowers costs and prices, and encourages producers to produce more of what consumers are willing and able to buy.</i></p> <p><i>Competition among buyers increases prices and allocates goods and services to those people who are willing and able to pay the most for them.</i></p>	<p>Explain how changes in the level of competition in different markets can affect them.</p>

Fast-food restaurants that set prices too high, or give slow, unfriendly service, risk losing customers to competing restaurants that offer lower prices, higher-quality products, and better service. In this way, competition benefits consumers. Understanding the benefits of competition and the costs of limiting competition helps students evaluate public policies that affect the level of competition in various markets. It also helps students understand their own roles as producers and consumers in a market economy — in terms of opportunities to compete with others and in terms of the limits that competition places on their incomes, career plans, and what they can buy and consume.

Competition improves productivity by forcing all suppliers to “be the best that they can be.” Productivity improvements, in turn, foster economic growth, and a better quality of life for current and future generations. It is important for students to recognize that competition contributes in a positive way to economic growth and the quality of life.

BENCHMARKS

At the completion of Grade 4 , students will know that:	At the completion of Grade 4 , students will use this knowledge to:
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| <ol style="list-style-type: none"> 1. Competition takes place when there are many buyers and sellers of similar products. 2. Competition among sellers results in lower costs and prices, higher product quality, and better customer service. | <ol style="list-style-type: none"> 1. Identify competitors in their community, using the yellow pages of the telephone book. 2. Explain how the opening of a second pizza shop in a small community affects prices, profits, service, and quality. |
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At the completion of Grade 8 , students will know that:	At the completion of Grade 8 , students will use this knowledge to:
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| <ol style="list-style-type: none"> 1. Sellers compete on the basis of price, product quality, customer service, product design and variety, and advertising. 2. Competition among buyers of a product results in higher product prices. | <ol style="list-style-type: none"> 1. Give examples of price and nonprice competition in the athletic shoe market. 2. Play several rounds of a market game in which the number of buyers is changed dramatically in each round and explain the impact of these changes on price. |
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3. The level of competition in a market is influenced by the number of buyers and sellers.

3. Estimate of the number of producers and consumers of cereals, guided missiles, agricultural products and electricity, and generalize about the relationship between the number of producers and consumers and the level of competition.

At the completion of **Grade 12**, students will know the Grade 4 and 8 benchmarks for this standard, and also that:

At the completion of **Grade 12**, students will use this knowledge to:

1. The pursuit of self-interest in competitive markets generally leads to choices and behavior that also promote the national level of economic well-being.
2. The level of competition in an industry is affected by the ease with which new producers can enter the industry and by consumers' information about the availability, price and quantity of substitute goods and services.
3. Collusion among buyers or sellers reduces the level of competition in a market. Collusion is more difficult in markets with large numbers of buyers and sellers.
4. The introduction of new products and production methods by entrepreneurs is an important form of competition and is a source of technological progress and economic growth.

1. Explain how people motivated by their own self-interest help market economies promote national well-being as long as there is active competition among buyers and sellers.
2. Explain why, in the last ten years, there have been no U.S. companies emerging to manufacture locomotives, but many emerging to manufacture silk screen T-shirts and sports clothing. Also, predict what happened to prices of resold tickets to sporting events after Arizona required all ticket scalpers to operate only in a small roped-off area near the stadium or arena in the two hours before an event.
3. Explain why collusion is more likely to work among international airlines than among U.S. farmers who produce wheat.
4. Create a timeline showing notable twentieth-century American entrepreneurs' products and production methods and write a brief essay on their impact on economic growth, competition, technological progress, and job opportunities.

CONTENT STANDARD 10

Students will understand that:	Students will be able to use this knowledge to:
<p><i>Institutions evolve in market economies to help individuals and groups accomplish their goals. Banks, labor unions, corporations, legal systems, and not-for-profit organizations are examples of important institutions. A different kind of institution, clearly defined and enforced property rights, is essential to a market economy.</i></p>	<p>Describe the roles of various economic institutions.</p>

Institutions play a number of roles in a market economy. Property rights help insure that people bear the costs and reap the benefits of their decisions. Property rights and contract enforcement encourage investment by assuring investors that they will reap the rewards of deferring consumption and assuming risk if these investments perform well. Limiting individual liability and allowing people to pool their investment resources through joint stock corporations also increases investment and future income.

Other institutions lower the costs buyers and sellers incur in their efforts to find each other in different kinds of markets. For example, banks match savers with borrowers; and investment banks match entrepreneurs who organize new firms with investors who provide the needed funds.

Many institutions work to promote the goals of certain interest groups. Labor union, for example, increase the negotiating power of workers in their dealings with employers.

Understanding economic institutions and the purposes they serve will help students use institutions more effectively and help them evaluate proposed new institutions or changes in the existing legal and institutional environment.

BENCHMARKS

At the completion of Grade 4 , students will know that:	At the completion of Grade 4 , students will use this knowledge to:
<ol style="list-style-type: none"> 1. Banks are institutions where people save money and earn interest, and where other people borrow money and pay interest. 2. Saving is the part of income not spent on taxes or consumption. 	<ol style="list-style-type: none"> 1. Explain the relationship between saving money and earning interest and borrowing money and paying interest, after participating in an activity in which they role play savers and borrowers. 2. Plan a budget for an allowance. The budget will include spending for goods and services, charitable donations, sales taxes, and saving.

At the completion of Grade 8 , students will know the Grade 4 benchmarks for this standard, and also that:	At the completion of Grade 8 , students will use this knowledge to:
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| <ol style="list-style-type: none"> 1. Banks and other financial institutions channel funds from savers to borrowers and investors. 2. Through the process of collective bargaining with employers, labor unions represent some workers in negotiations involving wages, fringe benefits, and work rules 3. Not-for-profit organizations are established primarily for religious, health, educational, civic, or social purposes and are exempt from certain taxes. | <ol style="list-style-type: none"> 1. Listen to a presentation on the role banks play in channeling funds from savers to borrowers and investors and draw a diagram showing the role that financial intermediaries play among savers, borrowers, and investors. 2. Read about the establishment of the AFL-CIO; explain why it emerged and what procedures it used to gain benefits for its members. 3. Identify a not-for-profit organization and explain the rationale for its tax exemption or explain why it should not be tax exempt. |
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At the completion of Grade 12 , students will know the Grade 4 and 8 benchmarks for this standard, and also that:	At the completion of Grade 12 , students will use this knowledge to:
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| <ol style="list-style-type: none"> 1. Property rights, contract enforcement, standards for weights and measures, and liability rules affect incentives for people to produce and exchange goods and services. 2. Incorporation allows firms to accumulate sufficient financial capital to make large-scale investments and achieve economies of scale. Incorporation also reduces the risk to investors by limiting stockholders' liability to their share of ownership of the corporation. | <ol style="list-style-type: none"> 1. Predict what might happen if there were no legal way to settle boundary disputes or if every state had its own system of weights and measures or currency; explain how strict liability for product defects affects the behavior of consumers and producers and how it affects the price of a good or service 2. Play the role of a business consultant hired to advise a partnership on the advantages it could enjoy by incorporating; write a letter outlining these benefits for their client. |
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CONTENT STANDARD 11

Students will understand that:	Students will be able to use this knowledge:
<i>Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services.</i>	Explain how their lives would be more difficult in a world with no money, or in a world where money sharply lost its value.

Most people would like to have more money. Students, however, often fail to understand that the real value of money is determined by the goods and services money can buy. Doubling the amount of money in an economy overnight would not, by itself, make people better off, because there would still be the same amount of goods and services produced and consumed, only at higher prices. Money is important to an economy, however, because as it replaces barter, it makes exchange less costly. As a result, people are more likely to specialize in what they produce, and then use money to buy whatever they want to consume, this increases the overall levels of production and consumption in a nation.

Understanding what determines the real buying power of money and earnings will help students make better decisions about their jobs and spending. Understanding the importance of money to society will also help them make more informed decisions about national policies related to banking, controlling the supply of money, and inflation.

BENCHMARKS

At the completion of Grade 4 , students will know that:	At the completion of Grade 4 , students will use this knowledge to:
1. Money is anything widely accepted as final payment for goods and services.	1. Identify things that have been used as money at different times and in different societies. Explain why some things can be used effectively for money and some things cannot.
2. Money makes trading easier by replacing barter with transactions involving currency, coins, or checks.	2. List five goods and services they want, and describe ways of obtaining these goods and services, without using money. Then explain why using money makes it easier to get the same five items.
3. People consume goods and services, not money; money is useful primarily because it can be used to buy goods and services.	3. Decide whether they would rather have a suitcase full of money or one full of food when stranded on a deserted island, and explain their answer.
4. Producers use natural resources, human resources, and capital goods, (not money) to make goods and services.	4. Explain why, when given money, they are unable to produce paper weights to sell at the forthcoming school craft fair unless they exchange the money for productive resources.
5. Most countries create their own currency for use as money.	5. Identify the currencies they would want to buy if they were going on a trip to Brazil, France, Romania, Vietnam, Australia, Japan and Kenya.

<p>At the completion of Grade 8, students will know the Grade 4 benchmarks for this standard and also that:</p>	<p>At the completion of Grade 4, students will use this knowledge to:</p>
<ol style="list-style-type: none"> 1. As a store of value, money makes it easier for people to save and defer consumption until the future. 2. As a unit of account, money is used to compare the market value of different goods and services. 3. Money encourages specialization by decreasing the costs for exchange. 	<ol style="list-style-type: none"> 1. Demonstrate their understanding of money as a “store of value” in responding to the following: A tomato farmer wants to save money for his five-year old daughter’s college education. Why is he better off selling his tomatoes for money and saving the money than he would be if he saved tomatoes to exchange for his daughter’s tuition when she reached age 18? 2. Explain how they can use relative prices to compare the value of three different fruits. 3. Explain how life might change for Dr. Hart, who specializes as a cardiologist, and for others in the community, if our society became a barter economy.

<p>At the completion of Grade 12, students will know the Grade 4 and 8 benchmarks for this standard and also that:</p>	<p>At the completion of Grade 12, students will use this knowledge to:</p>
<ol style="list-style-type: none"> 1. The basic money supply in the United States consists of currency, coins, and checking account deposits. 2. In many economies, when banks make loans, the money supply increases; when loans are paid off, the money supply decreases. 	<ol style="list-style-type: none"> 1. Select examples of money from a collection of pictures that show coins, currency, checking accounts, savings account passbooks, ATM cards, and various types of credit cards and explain whether each is considered money. 2. Demonstrate how successive deposits and loans by commercial banks, resulting from one new deposit in the banking system, cause the money supply to expand and how repayment of loans causes the money supply to contract.

CONTENT STANDARD 12

Students will understand that:	Students will be able to use this knowledge to:
<i>Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses.</i>	Explain situations in which they pay or receive interest, and explain how they would react to changes in interest rates if they were making or receiving interest payments.

Interest rates influence the borrowing and saving of business investors, consumers, and government agencies. Most people are unfamiliar with interest rates until they wish to borrow money for a major purchase such as an automobile, college education, or a house. When they enter the market for credit they encounter an unfamiliar price (the interest rate) offered by an unfamiliar business (a financial institution). It is necessary for students to understand that interest rates are determined by market forces that balance savings and borrowing. For many people, interest rates can represent significant financial costs and significant financial benefits over a lifetime.

It is also important for students to understand the incentive effects of interest rates. Interest payments compensate savers for postponing current consumption; they compensate lenders for the risk that borrowers might default on their loans; and they cover the cost of expected inflation over the term of the loan.

BENCHMARKS

At the completion of Grade 12 , students will know that:	At the completion of Grade 12 , students will use this knowledge to:
<ol style="list-style-type: none"> 1. An interest rate is a price of money that is borrowed or saved. 2. Like other prices, interest rates are determined by the forces of supply and demand. 3. The real interest rate is the nominal or current market interest rate minus the expected rate of inflation. 4. Higher real interest rates provide incentives for people to save more and borrow less. Lower real interest rates provide incentives for people to save less and borrow more. 	<ol style="list-style-type: none"> 1. Identify the current rates of interest on different kinds of savings instruments and different kinds of loans. 2. Determine the interest rate on 30-year fixed-rate conventional home mortgages over the last 15 years and explain why this rate rose and fell. 3. Collect data on the rate of inflation and interest rates for various kinds of loans and savings instruments over the past 15 years. Discuss the relationship between the observed inflation rates and expected rates of inflation in any given year. Using this information estimate the real rate of interest in these different years. 4. Collect data on interest rates, the rate of inflation, and new housing starts over the past 25 years. State how changes in real interest rates affect people's decisions to borrow in order to buy a house.

5. Real interest rates normally are positive because people must be compensated for deferring the use of resources from the present into the future.
 6. Riskier loans command higher interest rates than safer loans because of the greater chance of default on the repayment of the risky loan.
 7. Higher interest rates reduce business investment spending and consumer spending on housing, cars, and other major purchases. Policies that raise interest rates can be used to reduce these kinds of spending, while policies that decrease interest rates can be used to increase these kinds of spending.
5. Explain why people who save money receive interest payments while people who borrow money make interest payments.
 6. Explain why there are usually differences in interest rates for new and used car loans, or 15-year versus 30-year mortgages, and for individuals with good and bad credit ratings.
 7. Identify periods over the past ten years when the Federal Reserve System tried to increase interest rates in order to reduce business investment and consumer spending.

CONTENT STANDARD 13

Students will understand that:	Students will be able to use this knowledge to:
<p><i>Income for most people is determined by the market value of the productive resources they sell. What workers earn depends, primarily, on the market value of what they produce and how productive they are.</i></p>	<p>Predict future earnings based on their current plans for education, training, and career options.</p>

In a market economy, wages and salaries — the prices of labor services — are determined just as other prices are, by the interaction of buyers and sellers. The buyers of labor services are employers. They are willing to pay higher wages and salaries to those employees who can produce more or better goods or services in a given amount of time. Students who understand this will appreciate the value of the skills they can acquire by completing high school, and perhaps college or a vocational training program.

Understanding the forces affecting wages and other sources of income will be increasingly important in the future, when workers may change employers and careers more often than in the past. Regardless of the occupations or industries in which today’s students eventually work, they are likely to find that they will have to continue their education and training to maintain or increase their earnings.

BENCHMARKS

At the completion of Grade 4 , students will know that:	At the completion of Grade 4 , students will use this knowledge to:
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1. Labor is a human resource that is used to produce goods and services.
2. People can earn income by exchanging their human resources (physical or mental work) for wages or salaries.

1. Identify human resources in their community and the goods and services they produce.
2. Collect data from adults regarding their reasons for working, analyze the data, and generalize about why people work.

At the completion of Grade 8 , students will know the Grade 4 benchmarks for this standard, and also that:	At the completion of Grade 8 , students will use this knowledge to:
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1. Employers are willing to pay wages and salaries to workers because they expect to be able to sell the goods and services that those workers produce at prices high enough to cover the wages and salaries and all other costs of production.
2. To earn income people sell productive resources. These include their labor, capital, natural resources, and entrepreneurial talents.

1. Ask owners of fast-food restaurants why they are willing to pay a wage or salary to workers and conclude that restaurant owners do so because they expect to be able to sell the food and services produced at a price high enough to cover the wages and salaries and all other costs of production.
2. Survey several adults regarding their sources of income, and conclude that the largest portion of personal income for most people comes from wages and salaries.

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| <ul style="list-style-type: none"> 3. A wage or salary is the price of labor; it usually is determined by the supply of and demand for labor. 4. More productive workers are likely to be of greater value to employers and earn higher wages than less productive workers. 5. People’s incomes, in part, reflect choices they have made about education, training, skill development, and careers. People with few skills are more likely to be poor. | <ul style="list-style-type: none"> 3. Participate in a market simulation as employers and employees to determine wage rates for labor. 4. Decide which workers to hire and explain the hiring decisions, given a list of job applicants with different levels of productivity. 5. Consider a career choice, research the amount of education required and the medium income for this career. Identify reasons why high school dropouts frequently end up in poverty. |
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At the completion of **Grade 12**, students will know the Grade 4 and 8 benchmarks for this standard, and also that:

At the completion of **Grade 12**, students will use this knowledge to:

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| <ul style="list-style-type: none"> 1. Changes in the structure of the economy, the level of gross domestic product, technology, government policies, and discrimination can influence personal income. 2. In a labor market, in the absence of other changes, if wage or salary payments increase, workers will increase the quantity of labor they supply and firms will decrease the quantity of labor they demand. 3. Changes in the prices for productive resources affect the incomes of the owners of those productive resources and the combination of those resources used by firms. 4. Changes in demand for specific goods and services often affect the incomes of the workers who make those goods and services. 5. Two methods for classifying how income is distributed in a nation — the personal distribution of income and the functional distribution — reflect, respectively, the distribution of income among different groups of households and the distribution of income among different businesses and occupations in the economy. | <ul style="list-style-type: none"> 1. Review income data for jobs in manufacturing and service industries over the last 25 years. Explain how changes in the structure of the economy, gross domestic product, technology, government, prices, and discrimination have influenced income for jobs in these two areas. 2. Explain the impact of an increase in the minimum wage on their ability to secure an after-school job and the impact of the increase on their willingness to work. 3. Construct a flow chart to show how a change in a resource price affects producers and workers in a particular production process. 4. List three careers that are expected to provide new job openings and explain why. List three careers that are expected to experience a decline in job openings and explain why. 5. Identify the major change in functional distribution of income in the United States between the 1780s and the 1990s. Also, determine if there have been significant changes in the personal income distribution in the United States over the past 50 years. |
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CONTENT STANDARD 14

Students will understand that:	Students will be able to use this knowledge to:
<p><i>Entrepreneurs are people who take the risks of organizing productive resources to make goods and services. Profit is an important incentive that leads entrepreneurs to accept the risks of business failure.</i></p>	<p>Identify the risks, returns, and other characteristics of entrepreneurship that bear on its attractiveness as a career.</p>

Starting a new business, such as a “drive thru” that sells fruit-freezes, is difficult and risky. Challenges abound: hiring and managing the workers to make and serve the freezes, ordering supplies and making sure they arrive on time, giving prompt and courteous service so customers will return, and earning enough money to pay workers, taxes, suppliers and everyone else involved in the production and sales process, while still leaving something for the owner.

Spending money and using resources to supply a product is risky, because costs are incurred before consumers decide whether they will purchase the product at a price sufficiently high to cover the costs. Starting a new business or producing an entirely new product is especially risky because in the case of a new product producers know even less about how consumers will react.

Entrepreneurs accept the risks and organize productive resources to get products produced. Profits are the financial incentive and the income that entrepreneurs receive in return for their effort and risk — *if* they are successful. If they aren’t successful, losses are the financial incentives that tell entrepreneurs to stop using resources as they have been using them.

Understanding the roles of entrepreneurs, profits, and losses is important to workers, business owners, and consumers. Wages and employment opportunities at a business depend on the business’ success in earning profits and avoiding losses. Similarly, public policies that affect the profitability of a business will influence not only the owners and employees of the business, but also the consumers who buy the products produced by the business.

BENCHMARKS

At the completion of Grade 4 , students will know that:	At the completion of Grade 4 , students will use this knowledge to:
<ol style="list-style-type: none"> 1. Entrepreneurs are individuals who are willing to take risks, to develop new products, and start new businesses. They recognize opportunities, like working for themselves, and accept challenges. 2. An invention is a new product. Innovation is the introduction of an invention into a use that has economic value. 3. Entrepreneurs often are innovative. They attempt to solve problems by developing and marketing new or improved products. 	<ol style="list-style-type: none"> 1. Read a children’s book about an entrepreneur. Identify the main character’s entrepreneurial characteristics and compare their own entrepreneurial characteristics with those of the main character. 2. Identify three examples each of inventions and innovations. 3. Solve a problem by creating a new use for an existing product such as a wire coat hanger, thimble, or should pads. Also develop an advertising campaign for their new product.

<p>At the completion of Grade 8, students will know the Grade 4 benchmarks for this standard and also that:</p>	<p>At the completion of Grade 8, students will use this knowledge to:</p>
<ol style="list-style-type: none"> 1. Entrepreneurs compare the expected benefits of entering a new enterprise with the expected costs. 2. Entrepreneurs accept the risks in organizing resources to produce goods and services because they hope to earn profits. 3. Entrepreneurs and other sellers earn profits when buyers purchase the product they sell at prices high enough to cover the costs of production. 4. Entrepreneurs and other sellers incur losses when buyers do not purchase the products they sell at prices high enough to cover costs of production. 5. In addition to profits, entrepreneurs respond to other incentives including the opportunity to be their own boss, the chance to achieve recognition, and the satisfaction of creating new products or improving existing ones. In addition to financial losses, other disincentives to which entrepreneurs respond include the responsibility, long hours, and stress of running a business. 	<ol style="list-style-type: none"> 1. Read short biographies of various entrepreneurs and identify the risks each entrepreneur faced and the entrepreneur’s incentive(s) for accepting the risk. 2. Interview an entrepreneur to learn why he or she was willing to start a new business. 3. Analyze simple profit and loss statements and conclude that entrepreneurs or other sellers earn profits when their total revenues exceed their total costs. 4. Identify a restaurant that went out of business and give reasons why this might have occurred. 5. Read short biographies of several entrepreneurs, list the pertinent characteristics of each entrepreneur, and make a generalization about the non-financial incentives that motivate entrepreneurs and the risks or disincentives entrepreneurs face.

<p>At the completion of Grade 12, students will know the Grade 4 and 8 benchmarks for this standard, and also that:</p>	<p>At the completion of Grade 12, students will use this knowledge to:</p>
<ol style="list-style-type: none"> 1. Entrepreneurial decisions affect job opportunities for other workers. 2. Entrepreneurial decisions are influenced by government tax and regulatory policies. 	<ol style="list-style-type: none"> 1. Identify an entrepreneur and describe how the entrepreneur’s decisions affect job opportunities. 2. Explain how entrepreneurial activity is affected by a tax policy that affects income from profits and capital investment.

CONTENT STANDARD 15

Students will understand that:	Students will be able to use the knowledge to:
<i>Investment in factories, machinery, new technology, and in the health, education, and training of people can raise future standards of living.</i>	Predict the consequences of investment decisions made by individuals, businesses, and governments.

Students should recognize that by saving and investing money today they can benefit in the future by being able to buy such things as a car, a compact disk player, a trip to an amusement park, or other things they want that cost more than what they can afford immediately. They will face similar trade-offs throughout their lives. As adults they will save for many things other than toys and vacations — including housing, medical expenses, taxes, household and automobile repairs, their children’s education, and their own retirement. Savings deposited in banks and other financial institutions earn interest because those savings are loaned to businesses that want to invest in capital goods, or to people who are willing to pay higher interest rates to purchase homes, cars, or other things now rather than later. The new physical capital will, in turn, increase production and promote faster economic growth.

Businesses, governments, and other organizations face decisions similar to those confronting individuals: future benefits that arise from saving and investing today make it worthwhile to sacrifice some current spending. Knowing this will help students understand the various investment and dividend programs adopted by different corporations, as well as public policies involving taxation, spending programs, and investment in infrastructure, education, and other things that will increase future standards of living. It will help them appreciate that a better life in the future often requires patience and sacrifice in the present. It will also help them understand the importance of personal investment in education and training, and of business investments.

BENCHMARKS

At the completion of Grade 4 , students will know that:	At the completion of Grade 4 , students will use this knowledge to:
<ol style="list-style-type: none"> 1. When workers learn and practice new skills they are improving their human capital. 2. Workers can improve their productivity by improving their human capital. 	<ol style="list-style-type: none"> 1. Explain why professional athletes often have training equipment in their homes. 2. Make a pressman’s hat out of newspaper with no instructions, record how much time it took them to make the hat, and discuss the quality of the finished product. After receiving instruction on how to make the hat, and given time to practice, repeat the activity, record how long it takes to make the hat, and compare the quality of the hats produced with and without instructions and practice.

- Workers can improve their productivity by using physical capital such as tools and machinery.

- Complete a basic math worksheet using pencil and paper in a given amount of time; correct the work and record the number of problems completed and the number of correct answers. Repeat the activity, using calculators; correct the work, record the number of problems completed and the number of correct answers, and explain the differences in results.

At the completion of Grade 8 , students will know the Grade 4 benchmarks for this standard and also that:	At the completion of Grade 8 , students will use this knowledge to:
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- Standards of living increase as the productivity of labor improves.
- Productivity is measured by dividing output (goods and services) by the number of inputs used to produce the output. A change in productivity is a change in output relative to input.
- Technological change is an advance in knowledge leading to new and improved goods and services and better ways of producing them.
- Increases in productivity result from advances in technology and other sources.

- Analyze data on labor productivity and material standards of living. Draw a generalization about the relationship between the two. Also, tell how the living standards of their families would probably change if the productivity of every worker in the United States were to increase by 20 percent.
- Participate in a simulated production process in which they calculate productivity and analyze changes that occur through investment in human capital and capital goods.
- Create a timeline showing at least five new products that have occurred over the last 25 years. Also, explain how technological change led to this new or improved product.
- Study data about technological development and labor productivity for the last 25 years in the United States, India, Haiti, and Germany. Generalize about the relationship between technological change and changes in productivity from the data.

At the completion of Grade 12 , students will know the Grade 4 and 8 benchmarks for this standard, and also that:	At the completion of Grade 12 , students will use this knowledge to:
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- Economic growth is a sustained rise in a nation's production of goods and services. It results from investments in human and physical capital, research and development, and technological change, and from improved institutional arrangements and incentives.

- Analyze per capita real GDP data for several periods in history, identifying periods during which the United States experienced rapid economic growth; identify the factors that contributed to this growth.

2. Historically, economic growth has been the primary vehicle for alleviating poverty and raising standards of living.
 3. Economic growth creates new employment and profit opportunities in some industries, but growth reduces opportunities in others.
 4. Investments in physical and/or human capital can increase productivity, but such investments entail opportunity costs and economic risks.
 5. Investing in new physical or human capital involves a trade-off of lower current consumption in anticipation of greater future production and consumption.
 6. Higher interest rates discourage investment.
 7. The rate of productivity increase in an economy is strongly affected by the incentives that reward successful innovation and investments (in research and development, and in physical and human capital).
2. Compare the standard of living of individuals living in the United States in 1790, 1890, and 1990; explain the relationship between higher production levels, new technologies, and standard of living.
 3. Tell how growth in the computer industry affects employment and profit opportunities in the computer industry as compared to the typewriter industry.
 4. Engage in a simulated production activity involving investment in human capital and capital goods and identify the opportunity costs and economic risks.
 5. Discuss the advantages and disadvantages of investing in a riding mower given the following information: A teenager mows lawns to earn income. If she purchases a riding mower, she can mow lawns in less time and possibly earn more income.
 6. Explain why the purchase of an old car to use for delivering pizza's is less attractive when interest rates are higher.
 7. Explain how copyrights in the popular music industry and patents in the pharmaceutical industry affect the rate of productivity in each industry.

CONTENT STANDARD 16

Students will understand that:	Students will be able to use this knowledge to:
<p><i>There is an economic role for government in a market economy whenever the benefits of a government policy outweigh its costs. Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also redistribute income.</i></p>	<p>Identify and evaluate the benefits and costs of alternative public policies, and assess who enjoys the benefits and who bears the costs.</p>

Why does government pay private construction firms to build roads and highways? Why do the firms that build the roads not own them themselves and charge tolls to users? All kinds of goods and services are produced and distributed through private markets, so why not roads and highways, too? In flipping through the pages of the telephone directory, we observe a vast array of businesses and government agencies. Why do markets work well to supply much of what we want, while failing to produce other things we want?

Citizens should understand the limitations and shortcomings of markets and how some government policies attempt to compensate for market failures. Learning the economic as well as the political and social reasons for public sector services helps citizens make better choices about the appropriate size and scope of markets and government. It is also important that students be able to evaluate redistributive effects of government programs.

BENCHMARKS

At the completion of Grade 4 , students will know that:	At the completion of Grade 4 , students will use this knowledge to:
<ol style="list-style-type: none"> 1. Governments provide certain kinds of goods and services in a market economy. 2. Governments pay for the goods and services they use or provide by taxing or borrowing from people. 	<ol style="list-style-type: none"> 1. Brainstorm a list of goods and services not privately produced and explain how these goods and services are paid for. 2. Apply knowledge of the role of government in the economy in responding to the following question: Your community wants a new bridge. Who will pay for this bridge and how will they get the money? Why is this the best way to pay for bridges?

At the completion of Grade 8 , students will know the Grade 4 benchmarks for this standard, and also that:	At the completion of Grade 8 , students will use this knowledge to:
<ol style="list-style-type: none"> 1. Public goods and services provide benefits to more than one person at a time, and their use can not be restricted to only those people who have paid to use them. 	<ol style="list-style-type: none"> 1. Explain why tax dollars are used to produce national defense, elementary school education, and roads. Explain why, without government, these services would not be provided in the private sector.

2. If a good or service cannot be withheld from those who do not pay for it, providers expect to be unable to sell it and, therefore, will not produce it. In market economies, governments provide some of these goods and services.
 3. In the United States, the federal government enforces antitrust laws and regulations to try to maintain effective levels of competition in as many markets as possible; frequently, however, laws and regulations also have unintended effects — for example reducing competition.
 4. Most federal government tax revenue comes from personal income and payroll taxes. Payments to social security recipients, the costs of national defense, medical expenditures, and interest payments on the national debt constitute the bulk of federal government spending.
 5. Most state and local government revenues come from sales taxes, grants from the federal government, personal income taxes, and property taxes. The bulk of state and local government revenue is spent is for education, public welfare, road construction and repair, and public safety.
2. Answer the following questions: If the national, state, and local governments had no power to tax, what goods and services would we have to do without?
 3. Explain why the Federal Trade Commission might prevent the purchase of one large corporation by its closest competitor and what the effects might be on consumers, producers, and workers if the sale were allowed.
 4. Use data from the U.S. federal budget to construct two pie charts — one representing major categories of federal revenue and one representing major categories of federal expenditures.
 5. Compare the various sources of state and local revenues and various categories of state and local expenditures in their state and community with those for the U.S. federal government.

At the completion of **Grade 12**, students will know the Grade 4 and 8 benchmarks for this standard, and also that:

At the completion of **Grade 12**, students will use this knowledge to:

1. Markets do not allocate resources effectively if: (1) property rights are not clearly defined or enforced, (2) externalities (spillover effects) affecting large numbers of people are associated with the production or consumption of a product; or (3) markets are not competitive.
 2. An important role for government in the economy is to define, establish, and enforce property rights. A property right to a good or service includes the right to exclude others from using the good or service and the right to transfer the ownership or use of the resource to others.
1. Identify at least three economic roles of our government and cite a specific example of each.
 2. Predict what would happen to some land they own if they had no right to restrict its use by other or if they found crude oil on this land but had no right to sell it.

3. Property rights provide incentives for the owners of resources to weigh the value of present uses against the value of conserving the resources for future use.
4. Externalities exist when some of the costs and benefits associated with production and consumption fall on someone other than the producers or consumers of the product.
5. When a price fails to reflect all the benefits of a product, too little of the product is produced and consumed. When a price fails to reflect all the costs of a product, too much of it is produced and consumed. Government can use subsidies to help correct for insufficient output; it can use taxes to help correct for excessive output; or it can regulate output directly to correct for over- or under-production or consumption of a product.
6. When one producer can supply total output in a market at a cost that is lower than when two or more producers divide production, competition may be impossible. In the absence of competition, government regulations may then be used to try to control price, output, and quality.
7. Governments often redistribute income directly when individuals or interest groups are not satisfied with the income distribution resulting from markets; governments also redistribute income indirectly as side-effects of other government actions that affect prices or output levels for various goods and services.
8. Governments provide an alternative method to markets for supplying goods and services when it appears that the benefits to society of doing so outweigh the costs to society. Not all individuals will bear the same costs or share the same benefits of those policies.
9. A government policy to correct a market imperfection is not justified economically if the cost of implementing it exceeds its expected net benefits.
3. Analyze the following scenario and predict probable economic and social consequences: To save money, Congress passes, and the President signs into law, a bill that makes it illegal for any government to settle disputes over property rights. From now on, property-related matters will be settled privately.
4. Explain why there is a role for government in dealing with pollution, vaccinations and medical research; recommend what this role would be.
5. Explain why state and local governments use public money for elementary education and why tobacco and gasoline are heavily taxed.
6. Explain why there is usually only one local water supplier.
7. Describe three government assistance programs, explain why government provides them, and determine which groups in the economy benefit from them and which groups bear the costs to fund them.
8. Discuss the costs and benefits of public education and identify who gains the most and who bears most of these costs.
9. Analyze the costs and benefits of a \$500 per person state government job-training program to help adults without jobs. Make a recommendation on whether or not implementing this program is a good economic decision.

CONTENT STANDARD 17

Students will understand that:	Students will be able to use this knowledge to:
<p><i>Costs of government policies sometimes exceed benefits. This may occur because of incentives facing voters, government officials, and government employees, because of actions by special interest groups that can impose costs on the general public, or because social goals other than economic efficiency are being pursued.</i></p>	<p>Identify some public policies that may cost more than the benefits they generate, and assess who enjoys the benefits and who bears the costs. Explain why the policies exist.</p>

Do government officials try to promote the general welfare of the nation, or are they guided by their own self-interests? Businesses that fail to satisfy consumer wants go bankrupt; but how do we know when government programs fail, and how do we change or eliminate failed government programs? Why do some farmers receive large subsidies from the government, and why are many businesses protected from competition by tariffs or quotas — even when only a small percentage of the U.S. labor force is employed in those industries? Why don't taxpayers rise up and put a stop to the favoritism accorded to certain industries and special interest groups? And why do so few people participate in the political process, and so many choose not to register or vote?

It is important to realize that governments, like markets, also have shortcomings and imperfections. Citizens should understand the sources of these imperfections, including the distribution of costs and benefits of some programs that lead to special-interest problems, the costs involved in gathering and using information about different candidates and government programs, and the incentives that can induce government leaders and employees to act in ways that do not promote the general national interest. Understanding this allows citizens to compare actual with ideal government performance, and to decide about the appropriate role for federal, state, and local government.

BENCHMARKS

At the completion of Grade 12 , students will know that:	At the completion of Grade 12 , students will use this knowledge to:
<ol style="list-style-type: none"> 1. Citizens, government employees, and elected officials do not always directly bear the costs of their political decisions. This often leads to policies whose costs outweigh their benefits for society. 2. Incentives exist for political leaders to implement policies that disperse costs widely over large groups of people and benefit small, and politically powerful groups of people. 	<ol style="list-style-type: none"> 1. Predict the costs that would be imposed on the public if federal taxes were reduced and the budget was balanced by Congress, and explain how political goals conflict with economic goals. 2. Explain why a political leader would support an idea that helps only a few while harming many, such as a tariff on imported luggage or import quotas on sugar.

3. Incentives exist for political leaders to favor programs that entail immediate benefits and deferred costs; few incentives favor programs promising immediate costs and deferred benefits, even though the latter programs are sometimes economically more effective than the former programs.
 4. Although barriers to international trade usually impose more costs than benefits, they are often advocated by people and groups who expect to gain substantially from them. Because the costs of these barriers are typically spread over a large number of people who each pay only a little and may not recognize the cost, policies supporting trade barriers are often adopted through the political process.
 5. Price controls are often advocated by special interest groups. Price controls reduce the quantity of goods and services produced, thus depriving consumers of some goods and services whose value would exceed their cost.
3. Explain why, although most Americans say they are in favor of reducing the deficit, Congress doesn't vote to increase taxes.
 4. Analyze the following scenario: The United States allows Taiwan to export shirts to this country without placing a tariff on the imports. The Taiwanese can produce shirts at half the cost of shirts produced by American manufacturers. What groups in the United States and in Taiwan will be helped, and what groups will be hurt, if the United States continues the present free-trade policy toward Taiwan? Prepare an argument supporting the American shirt manufacturers' desire for a tariff on Taiwanese shirts.
 5. Explain the statement, *Removing rent controls in New York City is good economics but bad politics*. Also, explain who would gain and who would lose as a result of 10 percent ceiling on credit card interest rates.

CONTENT STANDARD 18

Students will understand that:	Students will be able to use this knowledge to:
<i>A nation’s overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy.</i>	Interpret media reports about current economic conditions and explain how these conditions can influence decisions made by consumers, producers, and government policy makers.

Changes in national levels of spending, production, and income can seem rather abstract and remote to students, because individuals can do little or nothing to change overall levels of economic activity. But these activity levels can have a profound effect on students future welfare, their job opportunities, the level of their prospective earnings, and the prices they will pay for things they buy. It is important, therefore, for students to understand possible causes of changes in these levels and how such changes can produce problems (such as unemployment and inflation) or opportunities (such as increased employment). Understanding these macroeconomic forces equips students to anticipate and respond intelligently to economic developments. It also enables students to predict the economic consequences of proposed government policies and to make informed choices among alternative public policy proposals.

BENCHMARKS

At the completion of Grade 8 , students will know that:	At the completion of Grade 8 , students will use this knowledge to:
<ol style="list-style-type: none"> 1. Gross Domestic Product (GDP) is a basic measure of a nation’s economic output and income. It is the total market value, measured in dollars, of all final goods and services produced in the economy in one year. 2. Per capita GDP is GDP divided by the number of people living in a country. 3. When consumers make purchases, goods and services are transferred from businesses to households in exchange for money payments. That money is used in turn by businesses to pay for productive resources (natural, human, and capital), and to pay taxes. 	<ol style="list-style-type: none"> 1. Explain what GDP is and how it can be used to describe a country’s economic output over time, comparing outputs from year to year. 2. Determine the per capita GDP for several countries, given data on population and GDP for each country. Identify a few other countries whose per capita GDP is similar to that of the United States. 3. Draw and label a circular flow diagram and explain the interrelated roles of households, businesses, and government in the economy.

At the completion of **Grade 12**, students will know the Grade 8 benchmarks for this standard and also that:

At the completion of **Grade 12**, students will use this knowledge to:

1. Nominal GDP is measured in current dollars; thus, an increase in GDP may reflect not only increases in the production of goods and services, but also increases in prices. GDP adjusted for price changes is called “real GDP.” Real GDP per capita is a measure that permits comparisons of material living standards over time and among different nations.
 2. The potential level of real GDP for a nation is determined by the quantity and quality of its natural resources, the size and skills of its labor force, and the size and quality of its stock of capital resources.
 3. One person’s spending is other people’s income. Consequently, an initial change in spending (consumption, investment, government, or net exports) usually results in a larger change in national levels of income, spending, and output.
 4. When desired expenditures for consumption, investment, government spending, and net exports are greater than the value of a nation’s output of final goods and services, GDP rises, and inflation occurs and/or employment rises.
 5. When desired expenditures for consumption, investment, government spending, and net exports are less than the value of a nation’s output of final goods and services, GDP decreases and inflation and/or employment decreases.
1. Gather current and historical data on real per capita GDP for the United States, Japan, Somalia, and South Korea and state a relationship between real GDP and standard of living.
 2. Locate and analyze relevant data from appropriate reference materials to assess the validity of the following statement: *It is doubtful that many of the countries of Sub-Saharan Africa will ever have GDPs that approach the value of those of Western European countries.*
 3. Read the following scenario and analyze the effects on the economy: A visitor comes into a community and spends \$100 on a single purchase at a video store. The video store’s income is higher by \$100. It spends \$80 of the money to pay the telephone bill, which now becomes income to the telephone company, and so forth.
 4. Describe the effect on the economy when desired expenditures for consumption, investment, government spending, and net exports exceed the value of a nation’s output of final goods and services.
 5. Describe the effect on the economy when desired expenditures for consumption, investment, government spending, and net exports are less than the value of a nation’s output of final goods and services.

CONTENT STANDARD 19

Students will understand that:	Students will be able to use this knowledge to:
<p><i>Unemployment imposes costs on individuals and nations. Unexpected inflation imposes costs on many people and benefits some others because it arbitrarily redistributes purchasing power.</i></p> <p><i>Inflation can reduce the rate of growth of national living standards because individuals and organizations use resources to protect themselves against the uncertainty of future prices.</i></p>	<p>Make informed decision by anticipating the consequences of inflation and unemployment.</p>

Inflation and unemployment are important because they affect national levels of economic growth and standards of living. Some aspects of inflation and unemployment can be addressed with public policies. Various political leaders and parties often have different ideas about which policies should be followed to deal with inflation and unemployment, however. The controversial policies, and the fact that almost everyone is affected by unemployment or inflation, explain why these two problems and alternative approaches to combat them are so widely reported in the news media, and why understanding them is important to people in a democratic political system.

BENCHMARKS

<p>At the completion of Grade 4, students will know that:</p> <ol style="list-style-type: none"> 1. Inflation is an increase in most prices; deflation is a decrease in most prices. 2. Unemployment exists when people who are willing and able to work do not have jobs. 	<p>At the completion of Grade 4, students will use this knowledge to:</p> <ol style="list-style-type: none"> 1. Determine in which years inflation occurred and in which years deflation occurred, given the prices for a market basket of goods and services for three different years. 2. Apply the standard definition of an unemployed person by explaining why retired people and students are not considered unemployed.
<p>At the completion of Grade 8, students will know the Grade 4 benchmarks for this standard, and also that:</p> <ol style="list-style-type: none"> 1. When unemployment exists, an economy's production is less than potential GDP and some labor resources are not used. 	<p>At the completion of Grade 8, students will use this knowledge to:</p> <ol style="list-style-type: none"> 1. Identify goods or services that could be produced if the local community's unemployed had jobs. Draw a flow chart that shows the ripple effect resulting from unemployment in a particular industry or community.

2. The labor force consists of people age 16 and over who are employed or actively seeking work.
3. Inflation reduces the value of money.
4. When people's incomes increase more slowly than the inflation rate, their purchasing power declines.
2. Determine whether each of the following is counted as a member of the labor force: (1) an elementary school student who has a paper route; (2) an army captain; (3) a retired butcher; (4) an insurance salesperson; (5) a woman who has decided not to work outside the home until her children are in school; and (6) a 42-year old civil engineer who looked for two years, but finally gave up searching for a job because he was discouraged by his lack of success.
3. Interview someone aged 50-59 years old about grocery prices. Compare the groceries that could be purchased for \$10 in 1967 with those that can be purchased for \$10 today.
4. Compare the prices of a market basket of goods in 1980 with similar prices today. Explain how inflation reduces purchasing power for people whose income is fixed or increasing slower than the rate of inflation.

At the completion of **Grade 12**, students will know the Grade 4 and 8 benchmarks for this standard, and also that:

At the completion of **Grade 12**, students will use this knowledge to:

1. The unemployment rate is the percentage of the labor force that is willing and able to work, does not currently have a job, and is actively looking for work.
2. The unemployment rate is an imperfect measure of unemployment because it does not: (1) include workers whose job prospects are so poor that they are discouraged from seeking jobs, (2) reflect part-time workers who are looking for full-time work.
3. Unemployment rates differ for people of different ages, races, and sexes. This reflects differences in work experience, education, training, and skills, as well as discrimination.
4. Unemployment can be caused by people changing jobs, by seasonal fluctuations in demand, by changes in the skills needed by employers, or by cyclical fluctuations in the level of national spending.
1. Calculate the unemployment rate for the following problem: Berks County has 200,000 people. Of that population 70,000 are full-time housewives, students, children, retired people, or people not looking for work. Of the remaining residents of Berks County, 110,000 people have jobs.
2. Explain why the following may be true: A weekly news magazine reports that the current unemployment statistic does not accurately reflect the true impact of unemployment.
3. Locate data pertaining to unemployment rates for young people and minorities, and explain why unemployment rates for these groups differ from the unemployment rates for other groups in the economy.
4. Give examples of each type of unemployment, analyze the differences among them, and identify which types cause more serious problems in the economy.

5. Full employment means that the only unemployed people in the economy are those who are changing jobs.
6. The consumer price index (CPI) is the most commonly used measure of price-level changes. It can be used to compare the price level in one year with price levels in earlier or later periods.
7. Expectations of inflation may lead to higher interest rates.
8. The costs of inflation are different for different groups of people. Unexpected inflation hurts savers and people on fixed incomes; it helps people who have borrowed money at a fixed rate of interest.
9. Inflation imposes costs on people beyond its effects on wealth distribution because people devote resources to protect themselves from expected inflation.
5. Explain why some people are unemployed when the economy is said to be functioning at full employment.
6. Determine the current price for a pair of designer sunglasses that cost \$50 in 1982-84, assuming the price has increased at the average rate of inflation.
7. Explain their answer to the following question: If you were going to lend \$100 to someone for a year, would you ask for more or less interest if you expected the prices of most things you buy to rise substantially over the year?
8. For each of the following cases, tell who would be harmed by an unexpected 10 percent inflation rate, who would benefit, and explain why: (1) Mike's retirement income is \$24,000 a year; (2) Bonnie borrowed \$5,000 last year and must pay it back at the end of this year; (3) John lent the \$5,000 to Bonnie last year and will be paid back at the end of this year; (4) Bob and Mary bought several houses as an investment 10 years ago, and now they plan to sell them; (5) businesses selling consumer products such as clothing and food.
9. Identify assets people can buy to protect themselves financially against inflation and discuss how much time people spent with this problem in times of high inflation (e.g. 1981) compared to times of low inflation (e.g. 1955).

CONTENT STANDARD 20

Students will understand that:	Students will be able to use this knowledge to:
<i>Federal government budgetary policy and the Federal Reserve System’s monetary policy influence the overall levels of employment, output, and prices.</i>	Anticipate the impact of federal government and Federal Reserve System macroeconomic policy decisions on themselves and others.

The U.S. federal government’s taxation and spending policies, and the Federal Reserve System’s monetary policies affect the nation’s overall levels of employment, output, and prices. However, many government taxation and spending activities are undertaken for other reasons, as well. Government expenditures for national defense, human services, and other purposes are made to meet specific objectives and not primarily because of their fiscal policy effects. Other important objectives must be merged with the goals of full employment, price stability, and economic growth. Therefore, government programs may have contradictory effects upon employment and inflation. Understanding these effects is complicated also by the time lags that occur before action taken pursuant to a specific policy begins to affect overall levels of employment, output, and prices.

In spite of these difficulties, policy makers and the general public continue to examine and debate the overall stabilization effects of public policy actions, because the consequences are so important. Citizens should understand the role of conflicting objectives and the limitations on the effectiveness of economic stabilization policies in order to develop realistic expectations about what can be accomplished with taxation, spending, and monetary policies.

BENCHMARKS

At the completion of Grade 12 , students will know that:	At the completion of Grade 12 , students will use this knowledge to:
<ol style="list-style-type: none"> 1. Fiscal policies are decisions to change spending and tax levels by the federal government. These decisions are adopted to influence national levels of output, employment, and prices. 2. In the short run, increasing federal spending and/or reducing taxes can promote more employment and output, but these policies also put upward pressure on the price level and interest rates. Decreased federal spending and/or increased taxes tend to lower price levels and interest rates, but they reduce employment and output levels in the short run. 3. In the long run, the interest-rate effects of fiscal policies lead to changes in private investment spending by businesses and individuals that partially, if not entirely, offset the output and employment effects of fiscal policy. 	<ol style="list-style-type: none"> 1. Identify historical examples of fiscal policies and explain whether these policies were adopted to influence levels of output, employment, prices, or all three. 2. Outline the fiscal policies they would recommend to correct each of the following: (1) rising unemployment and (2) rising inflation. Explain each recommendation. 3. Explain why an additional \$2 billion of federal spending on highways, financed by federal government borrowing, can reduce private investment spending in the economy in the long run.

4. The federal government's annual budget is balanced when its revenues from taxes and user fees equal its expenditures. The government runs a budget deficit when its expenditures exceed its revenues. The government runs a surplus when its revenues exceed its expenditures.
5. When the government runs a budget deficit, it must borrow from individuals, corporation, or financial institutions to finance that deficit.
6. The national debt is the total amount of money the federal government owes. This is the accumulated sum of its annual deficits and surpluses. The government pays interest on the money it borrows to finance the national debt.
7. In the long-run, inflation results from increases in a nation's money supply that exceed increases in its output of goods and services.
8. Monetary policies are decisions by the Federal Reserve System that lead to changes in the supply of money and the availability of credit. Changes in the money supply can influence overall levels of spending, employment, and prices in the economy by inducing changes in interest rates charged for credit, and by affecting the levels of personal and business investment spending.
9. The major monetary policy tool that the Federal Reserve System uses is open market purchases or sales of government securities. Other policy tools used by the Federal Reserve System include increasing or decreasing the discount rate charged on loans it makes to commercial banks and raising or lowering reserve requirements for commercial banks.
4. Determine whether the budget is in surplus, in deficit, or is balanced, and whether the effect upon the economy is contractionary, expansionary, or neutral if the government receives \$800 billion in taxes and (1) government spending is \$800 billion; (2) government spending is \$900 billion; (3) government spending is \$700 billion.
5. Explain that the federal debt is financed through the sale of government securities and identify the percentage of debt owed to foreigners.
6. Explain the difference between the budget deficit and national debt. Then determine how long it would take to pay off all of the national debt at the current rate of GDP if all GDP were devoted to that purpose.
7. Explain why inflation occurs after participating in two rounds of an auction where the number of goods available remains constant, but the money in circulation increases in round two.
8. Write an article for the business section of the local newspaper explaining what monetary policy is and how changes in monetary policy affect the money supply and interest rates. Using this information, advise a teenager about taking out a car loan and his/her opportunities for obtaining summer employment in the construction trade when the Federal Reserve is contracting the money supply.
9. Play the roles of members of the Federal Open Market Committee and decide for each of the headlines below whether they would recommend an expansionary policy or a contractionary policy and whether government securities should be purchased or sold.

Newspaper headlines: *Unemployment Rate Soars*
New Housing Starts Rise
CPI Rises for Third Consecutive Month