Lesson 1 - **Why Insurance and How Does It Work?**

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OVERVIEW

This lesson uses readings and group work to describe the risks that are a part of everyone's life. It then elaborates on five ways to handle risk. Two of these ways are to share and transfer risk, which is the purpose of insurance.

Insurance provides a vehicle by which consumers can transfer and share risk, but they must pay for this benefit or service, which insurance companies sell. Buying insurance is not appropriate for all levels and types of risks. In many cases, people are better off taking actions to avoid risk, retain (accept) risk or reduce risk. Buying insurance makes the most sense when the potential financial loss is great and there is a significant probability of loss over the long term. In these cases, it is wise to share and transfer risk by paying premiums for an insurance policy.

CONCEPTS

Avoiding risk
Decision making
Insurance
Opportunity cost
Premium
Probability
Reducing risk
Retaining risk
Risk
Sharing risk
Transferring risk

CONTENT STANDARDS

Economics

1. Productive resources are limited. Therefore, people cannot have all the goods and services they want; as a result, they must choose some things and give up others.

5. 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.

Personal Finance

Money Management

1. Explain how limited personal financial resources affect the choices people make.

2. Identify the opportunity cost of financial decisions.

6. Describe how insurance and other risk-management strategies protect against financial loss.

OBJECTIVES

The students will:

1. Identify possible risks in their lives and explain how they would handle each risk.

2. Explain why risk is an integral part of each person's life.

3. Explain how insurance enables the consumer to transfer and share risk.

4. Explain the role that probability and spreading the risk play in insurance.

5. Use a decision-making process to select coverages based on probability of loss and the amount of possible loss.

TIME REQUIRED

90 minutes

MATERIALS

1. Visuals 1.1, 1.2 and 1.3

2. One copy of Activities 1.1 (Optional), 1.2, 1.3 and 1.4 for each student

PROCEDURE

1. Project Visual 1.1, which defines **risk** as exposure to the chance of loss. (Cover up the two questions for right now.) Give some examples of how you have been exposed to risks since getting up this morning. Examples might include tripping over something in your home that could cause serious injury, getting food poisoning from the corner coffee shop because of the breakfast that you ordered, forgetting your grade book and having an automobile accident. Have the class identify the losses you might suffer for each situation. ***Possible medical costs for many of them, inconvenience in the case of the grade book, quality of life decreased in the short term for most of them, possible loss of income because of being out of work for a period of time for some of them, possible liability costs if you caused the automobile accident***

2. Uncover the first question on Visual 1.1. Have the students form groups of two, and have each group identify 10 risks they might face on a particular day. Give them five to seven minutes to make their lists. When the time is up, ask for volunteers to explain the risks their group listed. Then uncover the second question on Visual 1.1, and ask the class if individuals can avoid all risks in life. ***Definitely not, because our actions and the actions of others expose us all to the chance of loss***

3. Point out that risk is an integral part of everyone's life. Tell the students that there are five ways to handle risk. Project Visual 1.2, which lists the five ways. Ask for an example for each. ***Answers will vary and include the following:***
   - Avoid Risk ***You risk losing money if you play the lottery. You can avoid this risk by not buying lottery tickets.***
   - Retain Risk ***You accept the risk of doing poorly on a test because you didn't study.***
   - Reduce Risk ***You risk developing lung cancer if you smoke cigarettes. You reduce this risk if you don't smoke cigarettes.***
   - Transfer Risk ***You risk embarrassing yourself if you give a presentation in front of the entire school. You transfer the risk by asking someone else to give the presentation.***
   - Share Risk ***You risk making an unpopular choice if you select a disc jockey for the school dance by yourself. You share the risk if you ask others to join a committee to select the disc jockey.***

4. Have the students return to their groups and decide how they would handle each of the risks they listed. Or distribute Activity 1.1 and have them explain how they would handle each of the risks Samuel faces. Have one of the groups share their answers with the class. ***Answers for Activity 1.1 will vary and include the following:***

   A. Risk that Samuel will lose a friend because of something he says. ***Reduce***

Risk: Watch what he says.

B. Risk that Samuel, who plays on the basketball team, will miss making the basket that would win tonight's game. ***Retain Risk: This is a risk Samuel takes when he plays basketball.***

C. Risk that Samuel might hurt someone in an automobile accident that he caused. ***Transfer or Share Risk: Buy insurance. Many states will not permit drivers to retain the full risk; these states require drivers to have insurance before they can register their vehicle. Avoid Risk: Do not drive.***

D. Risk that Samuel might not take courses in high school that would enable him to get into a particular college. ***Avoid Risk: Confer with a guidance counselor about courses the college requires. Study the college catalog or talk to the admissions department of the college about the courses he will need to take in high school.***

E. Risk that someone might break into Samuel's school locker to steal his jacket. ***Reduce Risk: Make sure his locker is locked when he isn't using it. Avoid Risk: Keep his jacket with him during the day.***

F. Risk that the band in which Samuel plays will fail by not getting any bookings. ***Retain Risk: Starting a band involves risk: The band might be successful or it might fail. Reduce Risk: Make sure the band has practiced sufficiently, selected music that people like and established relationships with booking agents and club managers.***

G. Risk that Samuel's CD player will be stolen from his room at home. ***Share or Transfer Risk: Homeowner's insurance policies generally cover this type of situation. Retain Risk: If Samuel's family doesn't buy insurance, the family — and Samuel — retain the risk of having the item stolen. Reduce Risk: Keep the CD player out of sight when he isn't using it.***

H. Risk that Samuel's car will be stolen. ***Retain Risk: If the car is not very valuable, the risk is sustainable. Reduce Risk: Lock his car, and do not leave the keys in it when he parks it. Transfer or Share Risk: Buy insurance to cover theft.***

I. Risk that the weather for Samuel's proposed class picnic date at the state park might be cold, cloudy and rainy. ***Retain Risk: Such a risk is a part of planning a picnic. Reduce Risk: Look at the long-term weather forecast to see when the weather will be good, and plan accordingly. Share Risk: Have a committee decide the date.***

J. Risk of getting diabetes later in life. ***Retain Risk: Possibility of getting diabetes is one of the chances of life. Reduce Risk: Eat a healthy diet, stay slim and get adequate exercise.***

5. Project Visual 1.3, which defines **insurance** as coverage by a contract that guarantees payment if an insured loss occurs. (Cover up the rest of the visual for right now.) Give examples, such as medical insurance that pays the doctor and hospital costs if you get sick or automobile insurance that pays if you cause an accident and someone else's property is damaged.

6. Distribute a copy of Activity 1.2 to each student. Assign two students to act out the role-play as if they were on a television talk show. Have the students answer the questions that follow the interview, and discuss their answers in class.

A. What is the insurance company actually selling to the consumer? Is it a good or a service? ***The insurance company is selling a service: protection against loss.***

B. Do insurance policies generally specialize in covering certain types of risks, or are insurance policies written to cover all risks? ***Policies specialize in covering certain types of risks; it is impossible for one policy to cover all risks.***

C. Why are insurance companies interested in having many policyholders for any one policy? ***To spread the risk***

D. What is an insurance premium? Why is the insurance premium less than the value of the possible loss? ***An insurance premium is the amount the policyholder pays the company, generally figured on an annual basis, to receive coverage against certain risks. The premium is less than the value of the possible loss because the loss may not occur and other policyholders share in the losses that do occur.***

E. What is meant by sharing risk? ***A policyholder may not have a loss during the year, so the premium he or she pays goes toward covering the losses that others suffer.***

F. How does probability of loss affect the amount an insurance company charges for a premium? ***The probability of loss during the year among the policyholders is an important element of figuring out the premium for the policy. Other factors include the cost of doing business and the profit for the insurance company, if it is a for-profit firm.***

G. There are five methods for handling risk: avoid, retain, reduce, transfer and share. Which of these methods are people using when they buy insurance? ***Transfer and share: Insurance transfers the risk to the insurance company, and shares the risk with the other policyholders.***

7. Tell the students that there are many kinds of insurance. Project Visual 1.3 again, and now show the list of some common types. Go over the list, and tell the students that we will cover some of these types in more depth in other lessons.

8. Explain that consumers do not have enough money to protect themselves from all risks. They must make choices about the coverages they want. Point out that informed consumers will make decisions among these choices by considering the **opportunity cost** of each choice. Opportunity cost is the second-best alternative (or the value of that alternative) that must be given up when scarce resources are used for one purpose instead of another. Tell the students to suppose that they have moved into a rental apartment and have furniture and clothes worth $15,000. They must decide whether to buy renter's insurance: insurance that will reimburse them for the value of their personal possessions if the possessions are stolen or destroyed by fire. They decide to buy the insurance and pay a $75 annual premium for coverage. Their opportunity cost is their second-best alternative use of the $75 — for example, buying two concert tickets. Hand out Activity 1.3, and split the class into groups of three. Have each group read the scenario and answer the questions. Be sure each group knows they have $5,500 and buying all the insurance policies would cost $6,115. They must reject at least two policies. Have the students share their answers with the class.

A. Which types of insurance would you purchase with your money? ***Automobile, homeowner's and health insurance because of the amount of possible loss. Also, the probability of these losses is greater than for the others.***

B. Why is it important to consider the amount of possible loss and the probability of loss when you decide which types of insurance to buy? ***Both affect the economic impact of losses, which is one of the major reasons for purchasing insurance.***

CLOSURE

9. Have the students read Activity 1.4 and answer the questions.

A. What risks does Maria face? ***Getting to school late, having a car accident because she's in a hurry, failing a test, losing the softball game, not making the honor roll, losing friends because of her position on free trade, not getting her bracelet back, having her parents angry with her because it was stolen, Michael not liking her***

B. Would you suggest that Maria buy insurance to transfer or share each of these risks? Explain your answer. ***Maria can't buy insurance to protect herself against risks such as being late to school, failing the biology test and losing the game. But she could face a major economic loss if she has an accident with her car, and having the bracelet stolen is also an economic loss. So Maria could buy insurance to transfer or share these risks.***

C. Why is insurance considered to be a means of sharing risk? ***Policyholders pay a premium that's less than the value of the good they've insured. If they suffer a loss, the insurance company reimburses them from the premiums that all policyholders paid, sharing the risk of loss among all these policyholders.***

D. What is Maria's opportunity cost of buying automobile insurance? ***She gives up the next-best alternative use for the money she spends on the premium — probably saving for college.***

E. What role does probability play in insurance? ***Probability can be looked at from the perspectives of both the consumer and provider of insurance. Consumers should consider buying insurance for risks that could cause substantial economic loss and that have a greater probability of occurring during a time period. The provider looks at the probability of losses and the costs of doing business during the year when setting premiums.***

ASSESSMENT

Multiple-Choice Questions

1. Buying insurance is a way to

A. retain risk.
B. avoid risk.
C. transfer risk.
D. abolish risk.

2. Probability as it relates to insurance

A. means the chance of something happening.
B. is defined as the risks that are covered during a time period.
C. is sharing risk during the year.
D. is the annual premium.

3. What is the opportunity cost of buying insurance?

A. The amount of the premium
B. The next-best alternative that could be purchased for the amount of the premium
C. Protection from any losses because of the risk
D. Probability that a loss will occur

Essay Questions

1. Why is the purchase of insurance a way to transfer and share risk? ***By paying the premium for insurance coverage, you are asking the insurance company to cover part or all of the risk of loss, which is transferring the risk. Other people also purchase the same coverage. The insurance company uses the premiums from all of the policyholders to pay for losses suffered by the few during the covered time period, which is sharing the losses and the risk.***

2. One of your parents' friends says he's had automobile insurance for 20 years and never been in an accident, so he has never collected on his insurance. He thinks he is entitled to get all of his premiums returned. Do you agree? ***The insurance he bought was a service. He paid the premiums to be protected from substantial economic losses. Since the insurance company provided this service for 20 years, he is not entitled to a return of his premiums, even though he never had a loss on which to collect payments.***

VISUAL 1.1
RISK

Risk is exposure to the chance of loss.

1. What are 10 risks that you might face on a particular day?

2. Can individuals avoid all risks in life?

VISUAL 1.2
FIVE WAYS TO HANDLE RISK

- Avoid Risk
- Retain Risk
- Reduce Risk
- Transfer Risk
- Share Risk

VISUAL 1.3
COMMON TYPES OF INSURANCE

Insurance is coverage by a contract that guarantees payment if an insured loss occurs.

Types of Insurance

- **Automobile:** Provides financial protection to the owners, operators and occupants of an automobile in case of accidents or damages.
- **Health:** Protects against financial loss caused by the costs of illness or accident.
- **Life:** Provides financial protection to a family when the insured, who is typically the major wage earner of the family, dies.
- **Homeowner's:** Protects the homeowner from loss caused by fire, theft and storm damage of the structure and the possessions within the structure. A liability-insurance feature protects the homeowner from loss when someone is injured on the homeowner's property.
- **Renter's:** Protects the renter from loss of personal possessions because of such risks as fire, theft or storm damage.
- **Disability:** Provides income during a specified period when a person is unable to work because of illness or an accident.

ACTIVITY 1.1
HOW WOULD SAMUEL DEAL WITH THESE RISKS?

Listed below are various risks that Samuel faces. Write down your advice to him about how to deal with each risk — avoid it, retain it, reduce it, transfer it or share it — and explain each of your answers.

A. Risk that Samuel will lose a friend because of something he says.

B. Risk that Samuel, who plays on the basketball team, will miss making the basket that would win tonight's game.

C. Risk that Samuel might hurt someone in an automobile accident that he caused.

D. Risk that Samuel might not take courses in high school that would enable him to get into a particular college.

E. Risk that someone might break into Samuel's school locker to steal his jacket.

F. Risk that the band in which Samuel plays will fail by not getting any bookings.

G. Risk that Samuel's CD player will be stolen from his room at home.

H. Risk that Samuel's car will be stolen.

I. Risk that the weather for Samuel's proposed class picnic date at the state park might be cold, cloudy and rainy.

J. Risk of getting diabetes later in life.

ACTIVITY 1.2
INTERVIEW WITH AN INSURANCE POLICY

Read or listen to this interview, and then answer the questions that follow.

Interviewer: Welcome to the show. Today, I have a very special guest: an insurance policy. Insurance policies are difficult to interview because they are often hidden away in file folders or in safe deposit boxes. But this one agreed to come to our studio and is willing to answer some questions. So, insurance policy, what actually are you?

Insurance Policy: I was developed by the firm that sold me. I list all the losses that my company will cover if these losses happen to the person or group who buys me. The insurance company is actually selling protection to the consumer against loss from the risks I list.

Interviewer: Does this mean that one insurance policy generally covers all possible losses?

Insurance Policy: Oh no. Each policy states specifically which losses it covers. There are different policies for different types of losses, such as losses caused by automobile accidents, losses because of illness and losses to a home because of fire, wind or theft. It's possible to insure against almost any kind of economic loss if a firm or individual is willing to take on the risk.

Interviewer: What do you mean by "taking on the risk"?

Insurance Policy: When you go to a store and buy jeans, you give the store money and the salesperson gives you the jeans. In the case of insurance companies, the buyer gives the insurance company money — we call this the insurance premium — in return for protection against loss. The premium is generally for a specific time period such as a year. For example, I'm a homeowner's policy. The homeowner paid the insurance company a premium for a year's worth of coverage. The company will pay the homeowner if a loss that I cover occurs during the year. In other words, by paying the premium, my owner is asking the insurance company to take on the risk that something bad will happen to the house during the year. My owner is actually transferring the risk of loss to the insurance company in exchange for paying the premium.

Interviewer: But isn't the premium quite expensive? When I buy jeans, I need to pay the total price for the jeans. Does your premium each year have to equal the total value of the property?

Insurance Policy: Oh no. That's because of two other important insurance concepts: probability and sharing the risk. Most insurance companies sell policies to many different individuals and groups. The companies generally want large numbers of policyholders to keep the premiums reasonable. They then figure out the probability of losses within this group. Generally, everyone in the group won't have a loss each year. So, if you pay a premium one year and do not have a loss, then part of your premium goes to pay for someone else's loss. That's why insurance involves the sharing of losses among the policyholders.

ACTIVITY 1.2 (continued)
INTERVIEW WITH AN INSURANCE POLICY

Interviewer: Wait a minute. I still don't understand how the amount of the premium is determined.

Insurance Policy: People buy a certain type of insurance. Using a number of factors, the company predicts the probable loss for a year for this group. It adds this probable loss to the costs of operating the business, plus a profit if the company is a profit-making business, and reaches a total figure. Then the company divides this figure by the number of policyholders, and the result is the premium.

Interviewer: So that's why a policyholder does not pay a premium equal to the value of his or her probable loss.

Insurance Policy: Right. Whoops. (Pantomimes receiving a cell-phone call.) Sorry, my owner's calling. He had me on his desk for a number of days, looking to see what kind of coverages he has. It seems as if he has figured out the answer and wants to put me away in that dark file folder. Glad I had some sunlight for a while. Hope my comments have helped you. (Shakes hands with interviewer.)

A. What is the insurance company actually selling to the consumer? Is it a good or a service?

B. Do insurance policies generally specialize in covering certain types of risks, or are insurance policies written to cover all risks?

C. Why are insurance companies interested in having many policyholders for any one policy?

D. What is an insurance premium? Why is the insurance premium less than the value of the possible loss?

E. What is meant by sharing risk?

F. How does probability of loss affect the amount an insurance company charges for a premium?

G. There are five methods for handling risk: avoid, retain, reduce, transfer and share. Which of these methods are people using when they buy insurance?

ACTIVITY 1.3
WHICH COVERAGES SHOULD I CHOOSE?

You are 25 years old, single, have a good paying job, an automobile and a house. You are self-employed and must buy your own health insurance. You have $5,500 to spend on all insurance for the year. Take a look at the statistics on the following types of insurance, and choose the insurance coverages you would purchase. Then answer the questions.

Type of Insurance	Annual Premium	Average Loss	Probability of One Claim
Automobile	$1,400	$2,500 per claim, but actual loss could be $350,000 to $500,000 if you are liable for injuries of others	3 of 10 during covered year
Health	$3,600	$1,500 per year per claimant, but maximum loss depends on illness and could run into hundreds of thousands of dollars	8 of 10 during covered year
Disability	$500	$20,000 per year for rest of life if disabled during covered year	1 of 40 in age and occupational brackets during covered year
Jewelry valued at $5,000	$115	Loss is value of jewelry: $5,000	1 of 18 during covered year
Homeowner's	$500 for house and furnishings valued at $150,000	$3,000	2 of 10 during covered year

A. Which types of insurance would you purchase with your money?

B. Why is it important to consider the amount of possible loss and the probability of loss when you decide which types of insurance to buy?

ACTIVITY 1.4
A DAY IN THE LIFE OF MARIA

Read the following story and answer the questions.

Maria has a problem. She promised to pick up her friend Omar on the way to school, and Omar's running late. Maria is already worried about the test in biology today, and now this.

She just got her own car; her parents are helping her pay for it, but she had to promise to stay on the honor roll in return. She worries she won't make the honor roll this semester if she doesn't do well on the test, and she barely studied. She's had softball practice every afternoon this week, the last week before the state championship finals. Maria is the star pitcher. Her team has had a great year, so far. If she lets everyone down by not playing her best — Maria doesn't even want to think about the possibility of losing this important game.

Omar's finally ready, and they get to school just in time to avoid being tardy. Maria goes over her biology notes in study hall. She takes the test and feels pretty good about it but wishes she'd been better prepared. If she doesn't make the honor roll, she'll have to pay all the costs of her car herself, and this will cut sharply into the amount she saves for college and spends on clothes from the money she makes at her weekend job.

Fourth period is World History, where Maria gets involved in a heated discussion about free trade and its effect on the economic well being of a nation. She believes strongly that countries shouldn't have tariffs and quotas. Some of her friends aren't very happy with her position on the issue.

After lunch, Maria has art, where she's working on a pottery project. She takes off her bracelet so it won't be damaged and puts it in her locker, and then walks to class with some friends. When she returns to her locker after sixth period, she realizes with dismay that she didn't completely close the locker door, and her bracelet is gone. It was a birthday present from her parents, worth $100, and Maria dreads telling them how she lost it.

She can't let this depress her now, however. As she dresses for the last softball practice before the state finals, Maria imagines pitching a no-hitter and celebrating with her team after winning the trophy. Maybe she'll be able to talk to Michael, one of the players on the men's baseball team, at the postgame party. He hasn't paid much attention to her, but she likes his sense of humor and wants to be around him more. She tries to think of ways she can get to know him better as she heads out to the practice field.

ACTIVITY 1.4 (continued)
A DAY IN THE LIFE OF MARIA

A. What risks does Maria face?

B. Would you suggest that Maria buy insurance to transfer or share each of these risks? Explain your answer.

C. Why is insurance considered to be a means of sharing risk?

D. What is Maria's opportunity cost of buying automobile insurance?

E. What role does probability play in insurance?