Lesson 20 A Puff of Smoke Can Start a Fire

TEACHER PREPARATION

KEY CONCEPTS

Using tobacco products damages your body and can cause lung disease and cancer.

Smoking can affect the smoker and people nearby who inhale the smoke.

OBJECTIVES

By the end of this lesson, students should be able to:

- 1. identify the risks of smoking and using tobacco.
- 2. realize the financial cost of using tobacco products.
- 3. make the educated choice not to smoke or use tobacco.

KEY TERMS

Addiction: a physical, mental and emotional dependence on a substance to maintain a feeling of enjoyment, affecting the functioning of the brain and the body.

Consequences: the result or outcome of something that occurred earlier.

Discernment: to perceive by sense or intellect.

E-cigarettes: battery-operated devices designed to deliver nicotine with flavorings and other chemicals to users in vapor form.

Second-hand smoke: cigarette smoke that is breathed in by people around the smoker.

Chemicals found in a cigarette:

Acetone: found in nail polish remover. **Ammonia**: found in household cleaners.

Carbon monoxide: dangerous exhaust from cars, other engines.

Cyanide: found in rat poison.

Nicotine: harmful addictive substance.

Tar: partially burned material that damages lungs.

Tobacco: a plant that can be chewed or smoked in a cigarette, pipe or cigar.

BACKGROUND INFORMATION

Cigarettes and tobacco products kill millions of people each year. Nicotine and other chemicals found in chewing tobacco, cigarettes and e-cigarettes cause many diseases in the body. This problem can be reduced by encouraging our students to never begin to smoke. Children are susceptible to peer pressure and media pressure to smoke. As educators, we must present the realities of this health problem to our students at a young age and prepare them to say "no" to smoking. We want to encourage our students to seek healthy choices for their lives.

MATERIALS/PREPARATION

- 1. During the discussion in **Exploring the Lesson**, you may want to provide pictures of substances where the same chemicals are found that are in cigarettes (see **Key Terms**).
- 2. For **Exploring the Lesson Activity 2**, you will need a glass jar with a lid, one sponge, rubber band, newspaper and a lighter or match.
- 3. For **Exploring the Lesson Activity 3**, you will need 2 sponges.
- 4. For **Exploring the Lesson Activity 4**, you will need 1 cup (240 ml) of dark molasses or dark syrup and 1 tall thin glass or jar.
- 5. For **Discovering the Lesson** for **older elementary students** you will need copies of Appendix 20a on the cost of smoking.
- 6. For **Applying the Lesson Activity 3**, you will need copies of Appendix 20b (T-shirt pattern).

LESSON

BEGINNING THE LESSON

[Say to the students:] In Lesson 4, we talked about setting goals and dreams for our lives. It is good to have ideas of what we want to do with our lives. It is also important to realize there are issues we will encounter and choices we will make to either help us reach our goals or keep us from reaching our goals. We have called them *DreamMakers* or *DreamBreakers*.

Today, we are going to talk about smoking which can become a *DreamBreaker*. Sometimes, we are pressured by friends to try things that aren't good for us in order to look cool or be accepted. In our story today,

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it looks like Trish, Hector and Dugan are learning something about being 'cool' and smoking.

READINESS (5 minutes)

Unit 2

[Read to the students:] **Chapter 20 – The <u>Book of Consequences</u>** and the **Lens of Discernment**

Dugan was back in the library and he felt better. He began to slowly spin around with his head back looking up at the night sky that doubled as a ceiling over the Map of Wonders.

"This is the coolest library in the world," remarked Dugan. "It has everything!"

"Yes, including our special dog," laughed Trish looking at Edgar now curled at her feet.

"Well, not everything is cool," chided Dugan.

"So, what is cool?" asked Hector.

"An excellent question!" observed the Librarian.

"I feel another assignment coming on," smiled Trish.

"Quite true! What makes something 'cool'?" continued the Librarian.

"There's a kid at school who can make smoke come out of his ear ducts – that is pretty cool!" said Dugan. "You got to see it to believe it!"

"That's gross!" said Trish.

"'Cool' is believing you are above the consequences," added Hector.

"How did you come up with that?" asked Trish

"I just read a story about it in this book," said Hector, holding up a leather-bound book.

"Where did you find that?" asked Dugan.

"I'm pretty sure it found me! This is a very strange library," said Hector.

"I have an idea," said Dugan. He took the copper-ringed magnifying glass he used to read the story about Bucket Land. He held it up to the book.

"Wow!" exclaimed Trish, who was looking over both boys' shoulders. "That looks like the park across the street from our school! And look, there's some of the 'cool' crowd sneaking a smoke."

"What made you think to look at this book through the magnifying glass?" asked Hector.

"I don't know! It just seemed like a good idea," remarked Dugan.

As they watched the 'cool' crowd smoking, they began to see something else. One of the kids stood by a tree and blew smoke into the air. But the smoky cloud turned into a sickly green-colored hand, which became a fist that punched the boy in the chest. The boy coughed, and then the same green hand began to stroke the back of his head. The boy took another puff on his cigarette. The smoky hand continued to punish and soothe the boy.

"That is not cool," said Hector shaking his head. "That's awful!"

"I feel sorry for him," added Trish.

"Yeah, looks pretty dumb when you see what's going on behind the scenes," agreed Dugan.

"You are looking at the <u>Book of Consequences</u> through the 'Lens of Discernment'," said the Librarian. "It shows you layers of reality often missed by the casual observer."

"I wonder if we can take this book and lens back to school with us?" wondered Hector.

EXPLORE (20 minutes)

[Say to the students:] At first, Dugan, Hector and Trish thought the crowd they saw through the magnifying lens was 'cool.' What did they see to change their minds about the crowd? Do you think smoking is 'cool'? Let's learn more about cigarettes and what smoking does to your body. [Students need to know what is in a cigarette that is harmful to the human body. Write on the board, "What is in a cigarette?" List the contents of a cigarette given to you in **Key Terms**. Read over each one and write the other substances where the chemical is found (e.g., acetone — fingernail polish remover). Older students can copy this information into their journals. If possible, have pictures of each one for the students to see (e.g., household cleaners, nail polish remover, rat poison and a picture of a bus with exhaust coming out).

Make a list on the board about what smoking can do to the human body: Bad breath, yellow teeth, lung problems (cancer, shortness of breath), heart disease, liver disease, cancer of the mouth and esophagus.]

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Activity 1: [This experiment will help your students simulate what it feels like to have breathing problems due to smoking. Say to the students:] Everyone, stand up. Now, I want you to run in place until I tell you to stop. [Do this for about five minutes or until they are breathing hard.] Now, I want you to stand still and put one hand over your mouth and use the other hand to pinch your nose closed. You can keep your mouth open. How hard is it to breathe? How long did it take to breathe normally, again? This is how it feels to have lungs affected by smoking. How would this affect your ability to play games or sports?

Activity 2: What does smoking do to your lungs?

[Materials: glass jar with lid, sponge, rubber band, newspaper and lighter or match.

- 1. Attach the sponge to the underside of the jar lid with a rubber band.
- 2. Take a small wad of newspaper, light it and drop it into the jar. (Newspaper has some of the same materials found in cigarettes.)
- 3. Close the lid.
- 4. Watch the jar fill with smoke, let it continue for eight minutes which simulates how long smoke remains in the lungs when you finish smoking a cigarette.
- 5. Repeat 15 times to replicate how many cigarettes a person may smoke during a week, or even a day, depending on their habit. (Obviously, this will take time. You will need to multi-task as you continue to teach while also adding lit newspaper to the jar every eight minutes. If you cannot finish this experiment in one teaching period, save the examination of the sponge until the following day.)
- 6. Examine the evidence: Take the sponge off of the lid and notice the discoloration caused by the chemicals. Notice the black build up on the glass jar. This simulates what happens to your lungs when the tar and nicotine from cigarettes enter your lungs. Notice the leftover ash in the jar. This simulates the chemicals leftover in your lungs after you smoke a cigarette.
- 7. Discuss with the class what they learned from this experiment.]

Activity 3: [Take two sponges, thoroughly wet one and leave the other one dry and hard. Let each student feel both of them. The sponges demonstrate the difference between healthy lung tissue and a lung with damaged tissue.

Explain, once the air sacs in the lungs are hardened, they can no longer squeeze out the air.]

Activity 4:

[Pour 1 cup (240 ml) dark molasses or dark syrup slowly into a glass container. You are demonstrating how much tar is being introduced to the lungs of a pack a day smoker in a year. Have the students guess when you will stop pouring. Use the whole cup of syrup.]

[Say to the students:] Were you surprised at the amount of tar inhaled by a smoker in a year? Why or why not? What would happen if this person smoked two packs a day?

[Lead a discussion on the following topics. Say to the students:] What is an e-cigarette? [E-cigarettes deliver nicotine and other chemicals to the body in spite of being "smoke free." Smoking e-cigarettes is still a bad health choice and is also addictive. A link has been found between e-cigarettes and tobacco use.]

[Say to the students:] Have you ever heard of second-hand smoke? What is it? How is it dangerous? [Second-hand smoke is smoke breathed in by people who are around a smoker. It has been proven extremely dangerous to health as it can affect the body in the same way as first-hand smoking.]

[Say to the students:] All tobacco products can cause harm to your body. It is best to never chew tobacco or smoke any form of cigarette or pipe.

DISCOVER (20 minutes)

[Say to the students:] What have you learned about smoking from all of the experiments we did today?

[Discuss the following questions as appropriate for the age of your students.]

[Say to the students:] If smoking is so bad for your health, why do so many people do it? Let's brainstorm a list of reasons why people might start smoking. Do you think these reasons are good enough to put your health

at risk? Why or why not? Can you think of a safer way to fill those needs in your life? [Allow time for answers.]

Anyone who starts smoking can become addicted. What does it mean to be addicted? Why is being addicted to smoking a problem? Do you think it is hard to quit smoking once you start? Why? [Refer to the definition of addiction in Key Terms.]

How could you help a friend who smokes? What could you say to them? Who could you ask for help?

[Additional activity for **Older Elementary Students**]

Smoking is an expensive habit. [Find out what a pack of cigarettes costs in your city.] As a class, let's fill in the Smoking Adds Up (Appendix 20b) paper. Let's calculate together how much money you would spend in a year if you smoked one, two or three packs of cigarettes a week. Now, write down three things you would like to buy instead with the money spent on cigarettes. What conclusions can you draw?

APPLY (30 minutes)

For Younger Elementary Students

[Say to the students:] Write three things or draw three pictures you have learned about smoking in this lesson in your journal. When you are finished, use the blank T-shirt paper (Appendix 20b) and design a drawing showing why we should say "no" to smoking.

For Older Elementary Students

[Say to the students:] Write a paragraph in your journal about what you learned about smoking during this lesson. Include a personal decision you have made or need to make about smoking.

When you have finished writing in your journal, you can design a T-shirt (Appendix 20b) to share a message you have learned about smoking.

SHARE (5 minutes)

[Have the students hang their T-shirts design around the classroom or the school.]

ENDING THE LESSON

[Research has indicated 90 percent of people who develop an addiction to smoking begin before the age of 18. It is clear we need to educate, warn and develop strategies to help younger students make wise, healthy choices for their lives. Continue to educate, encourage and refer back to this lesson as you progress through the school year. This topic is not a "one-time lesson." A teacher has the opportunity and the influence to direct the thinking and decision making of the students in their class.]

GOING DEEPER (optional)

[As you teach this section, please allow time for students to answer each question. Say to the students:] Everyone, please, stand up! Move into an open space so you can move without bumping into each other. Now, close your eyes and spin around carefully! Don't fall! Keep your eyes closed and stop spinning. Take a breath and with your eyes still closed, point in the direction you think is north. In a moment, I'm going to have you open your eyes, but when you do, keep pointing the same way, even if you realize it isn't actually north. Okay, go ahead and open your eyes. Keep pointing, and look around to see where everyone else is pointing.

[Look around the room and based on the general consensus of where the students are pointing, say:] It looks like this is the direction the largest number of you guessed was north. Some people say the majority is usually right. Were most of you right this time? [Lead a brief discussion on majority opinions and how they are often correct, but not always.]

[Say to the students:] Which direction do you think is north now that your eyes are open? [Because they have been studying this in previous lessons, they ought to all point in the general direction of north.] Amazing! I believe you are right. But how did you know? Oh, that's right, we've been using our knowledge of directional signs in nature or looking at a compass to tell us which direction is north. So, just because most of our friends think something is right or okay doesn't necessarily mean it is. Sometimes, our friends could be as confused about *DreamBreakers* as you were about the direction of north when you were dizzy with your eyes closed.

Last time, we saw how Eve ate the forbidden fruit, gave it to her husband Adam, and he also ate. A similar thing is happening today. Most young people don't start smoking because they like the way it smells or because they want to get lung cancer! Why do some young people start smoking? Just like Eve wanted to do what she was told would make her smart and Adam wanted to do what his wife asked him to, some kids today want to seem "cool" or smart or just want to be part of the "in crowd."

There is an old saying: "We become like those we are with, so choose your friends carefully." What do you think that saying means — what is it trying to say? Do you think the saying is right? Do we become like the people we spend time with? Why or why not?

One of Jesus's disciples, a man named Paul, wrote about some things we should avoid if we want to become truly mature:

"We must not feel proud and boast about ourselves. We must not cause trouble for each other or be jealous of each other" (Galatians 5:26, Easy to Read Version).

In other words, we should not try to make ourselves feel important by telling others how great we are, which would be boasting. When we boast, we are really making others feel less important. On the other hand, when we are jealous of someone or envy their talents or possessions, we are putting ourselves down. A couple of lessons ago, we learned God made us in His image. If we believe we are God's image bearers, then we don't need to put ourselves down or put others down. We can get our value from God, not other people. God's image should be like our compass, telling us who we should be and what we should do. That is an important step toward not getting tricked by *DreamBreakers* such as smoking.

PARENT-TEACHER CONNECTION

Cigarettes and tobacco products kill millions of people each year. Nicotine and other chemicals found in cigarettes cause many diseases in the body. The destructive consequences of smoking can be avoided if children can be taught to resist all the influences urging them to try smoking.

Questions you might ask your child:

- 1. Can you tell me the story your teacher read? What are the <u>Book of Consequences</u> and the <u>Lens of Discernment</u>? (The <u>Book of Consequences</u> is a book teaching about hidden consequences and the <u>Lens of Discernment</u> is a magnifying glass allowing the observer to see the layers of reality often missed by casual observers.)
- 2. After the lesson on smoking, do you think you can resist the temptations to smoke you might hear from friends and the media? (After listening to your child's answer, share with your child why you think they should avoid smoking.)
- 3. What do you think about me when you see me (smoking) (not smoking)? (Tell your child about an experience you may have had dealing with smoking. It may be because you either refused to smoke or you have helped a friend try to quit smoking. It may be you have overcome smoking or you are trying to stop.)
- 4. What dreams and goals could be ruined by smoking? (If you have personal experience with smoking, you may want to share if smoking has interfered with your own goals and dreams. If you have refrained from smoking, you may want to share how that choice has enhanced your life and your dreams.)



Appendix 20a

Name:	Date:	
Smoking Adds Up		
nstructions: If each pack of cigarettes costs \$4, calculate how much isted below.	a smoker would spend in a year if he smoked the amounts	

1 Pack Per Week	2 Packs Per Week	3 Packs Per Week
Total for year:	Total for year:	Total for year:

Wish List

Instructions: If you could spend the money that smokers spend on their cigarettes, what would you buy?

Money Spent on 1 Pack Per Week			
Item	Cost	Total	
-			

Money Spent on 2 Packs Per Week			
Item	Cost	Total	
	2		

Money Spent on 3 Packs Per Week			
Item	Cost	Total	
9			
		,	

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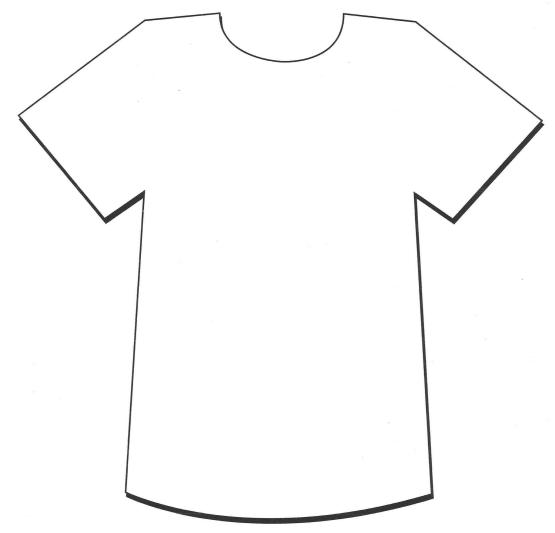
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Appendix 20b

Name:	Date:	

No Smoking T-Shirt

Instructions: First, do some research on KidsHealth to find out how smoking affects your health. Then, design a T-shirt to get the message out about the risks of smoking. Your T-shirt must include at least four facts about why smoking is bad for you, and it should also look really cool so kids will want to wear it!



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