Name: _____

Nonfiction Reading Test
Metal Detectors

Directions: Read the following passage and answer the questions that follow. Refer to the text to check your answers when appropriate.

Have you ever been to the beach? Did you see a man with a headset pointing a long pole at the ground? If so you might have seen a person using a metal detector. People use these devices to find metal.



Metal detectors make magnetic waves. These waves go through the ground. The waves change when they hit metal. Then the device beeps. This lets the person with the device know that metal is close.

The first metal detectors were meant to help miners. They were big. They cost a lot of money. They used a lot of power. And worst of all, they didn't work well. People kept trying to make them better.

Metal detectors got smaller. Now they are light and cheap. They also work better. That is why people bring them to the beach. They can look for rings in the water. They can look for phones in the sand. Metal detectors help them find these things. They usually just find junk though.

Metal detectors also protect people. They help to keep guns out of some places. They are in airports. They are in courthouses. Some schools use them. They help guards look for weapons. Guards use special wands to find metal on a person.

These devices save lives in other ways too. During wars, people plant bombs in the ground. When the war ends, they don't clean up their messes. This is unsafe for the people who live in those places. Others use metal detectors to find bombs. They remove them and help the people.

These devices also make clothes safer. It sounds funny, but it's true. Most clothes are made in big factories. There are lots of needles in these places. Needles break from time to time. They get stuck in the clothes. They would poke people trying them on. They don't though. That's because our clothes are scanned for metal. Isn't that nice? Let's hear it for metal detectors. They make the world a safer place.

LIVEWORKSHEETS

1. Which was **not** one of the problems with the first metal detectors?
a. They were too big.
b. They were too expensive.
c. They didn't work well.
d. They were unsafe.

2. Which best describes the main idea of the second paragraph?
a. It describes the sounds of a metal detector.
b. It explains how metal detectors work.
c. It warns about the effects of metal detectors.
d. It explains how magnetic waves move.

3. How do metal detectors make clothing safer?
a. Metal detectors make sure factory machines are working the right way.
b. Metal detectors make sure workers don't bring weapons into factories.
c. Metal detectors make sure that broken needles don't get into clothing.
d. Metal detectors help people recover lost clothing at the beach.

4. Why were metal detectors first used?
a. To help miners
b. To help security guards
c. To help doctors
d. To help soldiers

5. According to the text, metal detectors have been used in all of the following **except** which?
a. schools
b. churches
c. courthouses
d. airports

6. How do metal detectors help soldiers?
a. They warn soldiers when bullets are coming.
b. They help soldiers find hidden bombs.
c. They find weaknesses in their armor.
d. They create a relaxing beeping noise.

7. Why do people bring metal detectors to the beach?
a. Metal detectors help people keep the sand clean and safe.
b. Metal detectors look cool.
c. Metal detectors help people find valuable items.
d. Metal detectors help guards keep weapons away from the beach.

8. Which happens first?
a. The metal detector beeps alarmingly.
b. The magnetic waves hit metal and change.
c. The magnetic waves go through the ground.
d. The metal detector creates magnetic waves.

9. How did metal detectors get better over time?
a. They became cheaper.
b. They became lighter.
c. They began working better
d. All of these

10. Which title would best describe the purpose of this text?
a. *A Day at the Beach: Using Your Metal Detector to Find Things*
b. *Metal Detectors: a Complete the Story of Their Invention*
c. *Magnetism and More: How a Metal Detector Works*
d. *Metal Detectors: What They Do and How We Use Them*

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