

LIE DETECTORS

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

1. **Why do people use metal detectors at the beach?**
 - a) To find lost items like rings and phones
 - b) To measure the temperature of the sand
 - c) To dig for seashells
 - d) To listen to radio signals
2. **What was a major problem with the first metal detectors?**
 - a) They only worked underwater
 - b) They were too small to be useful
 - c) They were big, expensive, and didn't work well
 - d) They could only detect silver
3. **How do metal detectors help keep people safe?**
 - a) They remove metal from clothing
 - b) They help find lost jewelry
 - c) They scan for weapons in places like airports and courthouses
 - d) They make loud noises to scare away criminals
4. **What happens when a metal detector finds metal?**
 - a) It stops working
 - b) It beeps to alert the user
 - c) It vibrates and changes color
 - d) It sends a message to the police

Decide if the following statements are true or false

5. Metal detectors work by sending sound waves through the ground.
6. Guards use metal detectors to check for weapons in some schools.

7. People only use metal detectors for fun at the beach.

Match the following questions of use and purpose

Use

- A. Searching for lost rings at the beach
- B. Checking people at courthouses
- C. Detecting hidden bombs after wars

Purpose

- 1. Finding valuable or lost objects
- 2. Keeping places safe from weapons
- 3. Protecting people from hidden dangers