

Year 4 Science: Properties of Materials Assessment

Learning objective: To identify, describe, and compare the properties of different materials.

Read each question carefully. Use the word bank to help you spell the key words. Answer in the boxes provided.

Nova the owl is looking at her collection of objects. She has a shiny metal spoon, a soft cotton towel, a clear glass marble, and a stretchy plastic band. She needs your help to describe them.

Word bank: transparent · opaque · flexible · rigid · waterproof · absorbent · metal · plastic · wood · glass

1. 1. Look at the glass marble. Can you see through it? Use the word bank to describe this property. (2 marks)

2. 2. Max the monkey has a towel. It soaks up water easily. Which property word describes the towel? (2 marks)

3. 3. Which material would be best to make a raincoat? Explain why by using the word 'waterproof'. (4 marks)

4. 4. Sort these into two groups: 'Rigid' (hard to bend) and 'Flexible' (easy to bend). Objects: Metal spoon, Plastic band, Wooden ruler, Fabric sock. (6 marks)

5. 5. Write a short explanation. Why is plastic a good material for a water bottle? Think about whether it is waterproof and if it breaks easily. (6 marks)

Draw: Draw one object made of metal and one object made of wood. Label your drawings.

A large, empty rectangular box with a thin black border, intended for a student to draw an object made of metal and another made of wood. The box is currently blank.

Extension challenge: Imagine you are designing a new umbrella. Write two sentences about which material you would choose and why. Total: /25