Nova’s Marvelous Materials

Learning objective: To identify and describe the properties of a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.

Read the text carefully and answer the questions below in full sentences.

Nova the barn owl loves to observe the world from her tall oak tree. She has noticed that everything around us is made of different materials, each with its own special properties. Near the forest stream, Nova spots a shiny metal bucket. Metal is strong and hard, which makes it perfect for carrying water. Nearby, a clear glass jar sits on a picnic table. Because glass is transparent, we can see exactly what is inside. Nova also watches a child wearing a bright yellow raincoat. The coat is made of plastic, which is waterproof, keeping the child dry during a sudden drizzle. If you look closely at the forest floor, you will see jagged rocks. Rocks are natural, hard, and very durable. Finally, Nova spots a wooden bench. Wood is sturdy and holds its shape well, making it ideal for sitting. By understanding these materials, we can choose the best one for every job. Whether it is building a shelter or keeping our belongings safe, choosing the right material is the first step of a brilliant scientific discovery!

Word bank: transparent · flexible · durable · properties · opaque · waterproof

1. Name two materials mentioned in the text that are described as being hard. (2 marks)

2. Why is plastic a good material for a raincoat? (2 marks)

3. Why do you think the author chose to use the word 'transparent' to describe the glass jar? (2 marks)

4. What does the text suggest about why we need to understand the properties of materials? (2 marks)

5. If you were building a bridge for a toy car to cross a pond, which material from the text would you choose and why? (3 marks)

Draw: Draw a picture of Nova the owl sitting on a branch, surrounded by four different objects mentioned in the text, and label the material each one is made from.

Extension challenge: Go on a 'material hunt' around your classroom or home. Find three items and write down what material they are made from and one property that makes that material useful for that object.