

Nova's Material Mystery

Learning objective: To identify and describe the properties of materials and understand why they are chosen for specific uses.

Read the story about Nova the owl. Then, answer the questions below. Use the word bank to help you spell the key terms. Write in full sentences where you can.

Nova the owl is building a new home in the old oak tree. She wants it to be cosy and dry. Nova looks at different materials to see which ones are best. First, she finds a thin piece of plastic. It is transparent, so she can see the stars through it, but it is too flimsy to keep out the cold. Next, she tests a piece of metal. It is very strong and durable, but it is hard to bend into a nest shape. Nova picks up a piece of thick rubber. It is waterproof, which is perfect for keeping the rain out. She also collects soft wool. The wool is flexible and keeps her warm. Nova decides to use the rubber on the roof to keep her dry and the wool inside to stay snug. Choosing the right material for the job is very important. Nova is happy because her home is now safe and comfortable. She learns that every material has a special property that makes it useful for different things.

Word bank: transparent · waterproof · flexible · durable · property · material

1. Which material did Nova choose to keep the rain out of her home? (2 marks)

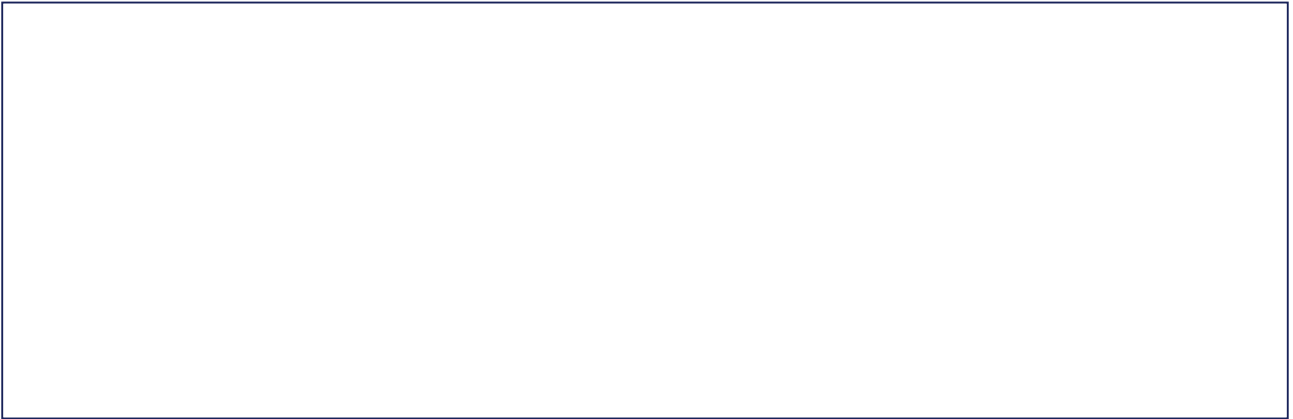
2. What is the meaning of the word 'transparent' in the story? (2 marks)

3. Why did Nova decide not to use the metal for her nest? (2 marks)

4. Why is it important to test a material before using it? (2 marks)

5. If you were building a roof, would you choose plastic or wool? Explain your choice. (3 marks)

Draw: Draw Nova the owl in her new nest. Show the parts of the nest made from rubber and the parts made from wool.



Extension challenge: Look around your classroom. Can you find one object that is waterproof and one object that is flexible? Write down what they are.