Zara’s Sculpture Studio: Creating in 3D

1. 3D (1 mark)

Working: The passage states Zara makes 3D art which has height, width, and depth.

Tick 3D.

2. Zara could use clay and card (or wire). (2 marks)

Working: The passage lists clay, card, and wire as materials Zara uses.

Award 1 mark for each correct material named.

3. Texture is how a surface feels. An example is a rough texture like tree bark. (3 marks)

Look for: Definition of texture as surface feel and a relevant example.

Good: Texture is how something feels. A statue could be smooth.

Better: Texture is the way a surface feels when you touch it. A statue might feel rough like a rock.

Best: Texture describes the surface quality of an object, like how it feels to touch. For example, a statue could have a rough texture like tree bark or a smooth texture like glass.

What moves an answer up: Moving up requires more precise vocabulary and a more descriptive, specific example.

4. A strong base is needed to stop the tower from falling over. (4 marks)

Look for: Understanding of balance, stability, or gravity.

Good: You need a strong base so it does not fall down.

Better: A strong base is important because it holds the weight of the tower and keeps it steady so it doesn't tip over.

Best: A strong base provides stability. If the base is too small or weak, the tower will become top-heavy and fall over because it cannot support the weight above it.

What moves an answer up: Moving up requires explaining the 'why' behind the stability (weight/balance).

5. Clay is soft and you mould it with your hands. Wire is stiff and you bend it to make a frame. (5 marks)

Look for: Comparison of the physical properties (malleability vs. rigidity).

Good: Clay is soft and wire is hard.

Better: Clay is soft and you can mould it into shapes with your fingers. Wire is hard and you have to bend it to make a frame.

Best: Clay is a malleable material that you can easily mould into solid shapes. Wire is a rigid material that you bend to create a skeleton or frame for a sculpture.

What moves an answer up: Moving up requires using subject-specific vocabulary like 'malleable' and 'rigid'.

6. I would use clay for the body and toothpicks for the spikes. I would push the toothpicks into the soft clay. (5 marks)

Look for: A clear plan using materials and a technique for the spikes.

Good: I would use clay for the hedgehog and sticks for the spikes.

Better: I would use brown clay to make the hedgehog's body. I would use small twigs for the spikes and push them into the clay.

Best: I would mould brown clay into a round shape for the body. I would use sharp, thin twigs as spikes and carefully push them into the clay before it dries.

What moves an answer up: Moving up requires more detail on the process and specific material choices.

7. If it is twice as big, the clay might be too heavy and collapse, or the wire frame might bend. (5 marks)

Look for: Understanding that larger structures require more support or stronger materials.

Good: It might fall over because it is too heavy.

Better: If I make it twice as big, the clay will be much heavier and the base might not be strong enough to hold it up.

Best: If the sculpture is twice as big, the weight of the clay will increase significantly. The structure might collapse because the materials cannot support the extra weight.

What moves an answer up: Moving up requires linking the size increase to the physical problem of weight and structural integrity.

What a secure answer looks like

A secure answer shows an understanding that 3D art has physical properties like weight, texture, and stability. Students should be able to link their material choices to the desired outcome.

If your child is stuck

Ask the child to imagine holding the sculpture. Does it feel smooth or bumpy? If they were a giant, would the sculpture be heavy or light?

Common mistakes to watch for

Children often confuse 'form' with 'shape' (2D vs 3D) or forget that larger sculptures require stronger internal structures to prevent collapsing.