

Max's Strong Structures Challenge

Learning objective: To understand how to make structures strong, stable, and stiff.

Max the monkey is building a tall tower for his fruit. Use your knowledge of structures to help him. Look at the word bank for help. Write your answers in the boxes.

Word bank: Stable · Triangles · Base · Strong · Cardboard

1. Max wants his tower to be steady. Should he make the base wide or narrow? Why? (2 marks)

2. Which shape is the strongest shape to use in a frame? (Hint: It does not wobble!) (1 mark)

3. Max uses tubes of cardboard. Are they stronger than flat sheets of paper? Yes or No? (1 mark)

4. Why is it important to have a heavy base for a tall building? (2 marks)

Draw: Draw a picture of a tall tower. Add a wide base at the bottom to help it stay stable. Label your drawing with one 'triangle' and one 'strong base'.



Extension challenge: If you had £5 to spend on building materials, would you buy wooden sticks or sticky tape? Explain why to a partner.