

Name:

Date:

Unit title: Gears and pulleys

1 What can be described as a wheel with teeth?

- A A pulley.
- B A gear.
- C A gear system.
- D A pulley system.

2 Which gear in this system would spin the slowest?

- A A.
- B B.
- C C.
- D None - they would all spin at the same speed.

3 If gear A spins clockwise which gear will spin anti-clockwise?

- A B.
- B C.
- C B and C.
- D None - they all spin in the same direction.

4 Order the gears to increase the output force by the largest possible amount.

- A A, B, C.
- B A, C, B.
- C B, C, A.
- D C, B, A.

5 What can be described as a wheel with a groove that a rope or belt fits into?

- A A gear.
- B A gear system.
- C A pulley.
- D A pulley system.

6 How many pulleys are in this pulley system?

- A One.
- B Two.
- C Five.
- D None - this is a gear system.

Name:

Date:

KS2 Quiz

Unit title: Gears and pulleys

7 Which pulley system will decrease the size of the effort (force) needed to lift the weight?

- A A.
- B B.
- C C.
- D All of them.

8 Which of the following can be used for a market research survey?

- A The eco-gadget must be safe to use.
- B Is the eco-gadget bike made from sustainable materials?
- C The class wants to make smoothies without using electricity.
- D What creative activities would you like an eco-gadget bike to do?

9 Which of the following can be used for a problem statement?

- A The eco-gadget must be safe to use.
- B Is the eco-gadget bike made from sustainable materials?
- C The class wants to make smoothies without using electricity.
- D Sustainability is important to our brand.

10 Design a pulley system for this crane. Draw and annotate the diagram to explain how it works.