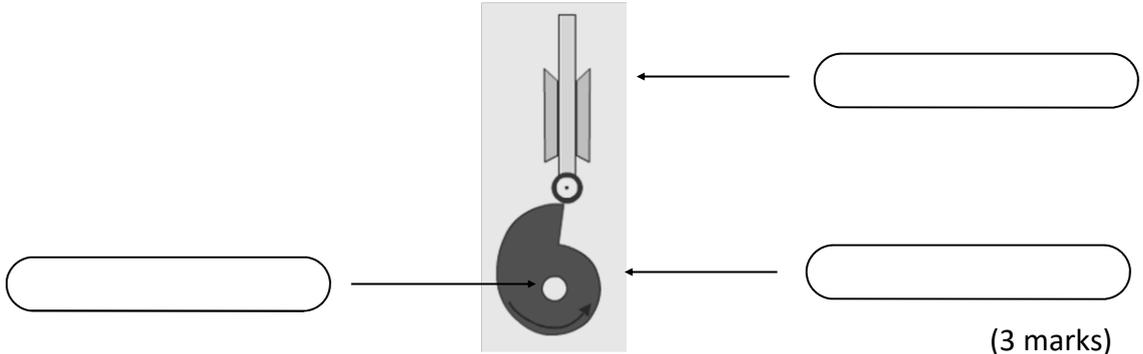




: End of Topic Assessment

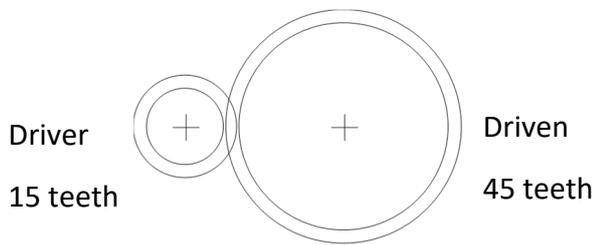
Use some of the words in the box to label the diagram of a CAM mechanism

- Cam
- Moving pivot
- Fixed pivot
- Follower
- Linkage



(3 marks)

1. What is the gear ration of the mechanism below?



- A 1 : 10
- B 1 : 30
- C 3 : 1
- D 60 : 1

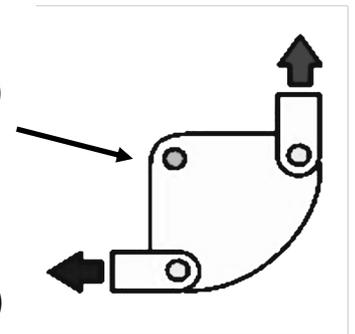
(1)

2a. What is the mechanism called on the right hand side.

..... (1)

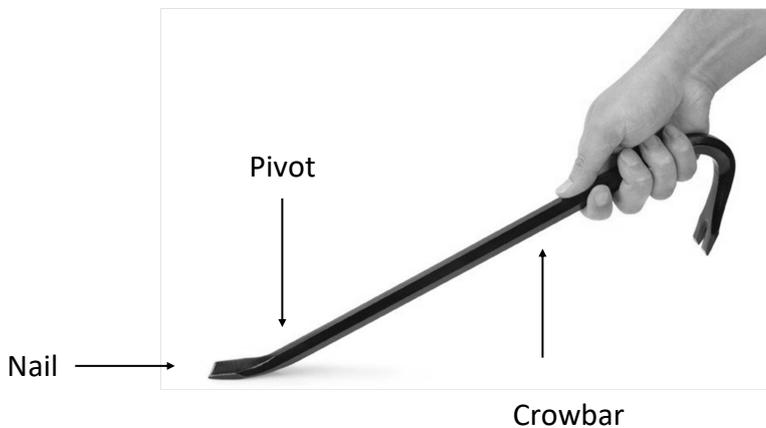
b. Describe what the mechanism does.

..... (1)



3a. A crowbar is an example of a lever. What type of lever is a crowbar

..... (1)



3b. Explain why using this type of lever helps to remove a nail

..... (1)

4. Which of the following statements about **second order levers** is true?

1 mark

- A Second order levers have the pivot between the load and effort
- B Second order levers have the effort between the pivot and load
- C Moving the pivot and load further apart makes the load easier to lift
- D A wheelbarrow is an example of a second order lever

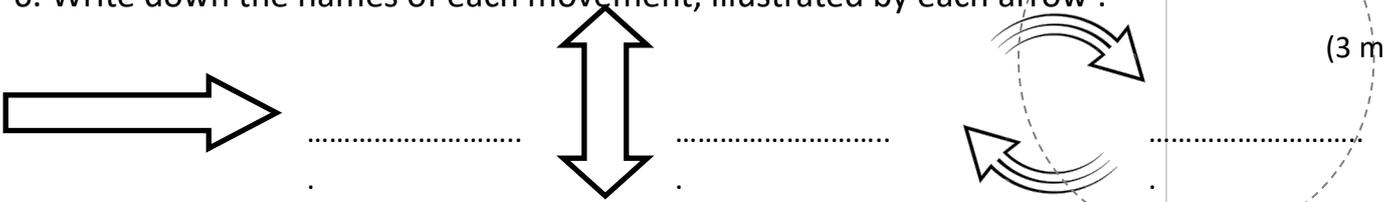
5 **Cam mechanism** change one type of motion into another type. Which ONE of the following describes the change in motion caused by a cam mechanism?

1 mark

- A Rotary motion is converted to linear motion
- B Reciprocating motion is converted to rotary motion
- C Linear motion is converted to oscillating motion
- D Rotary motion is converted to reciprocating motion

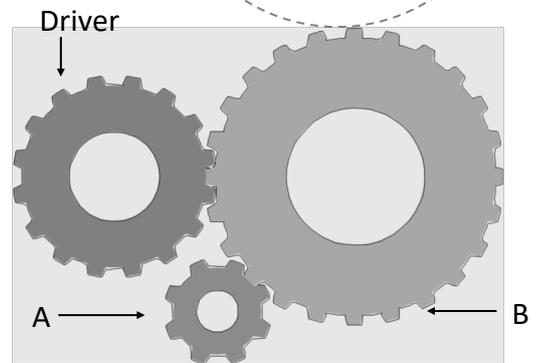
6. Write down the names of each movement, illustrated by each arrow :

(3 mark)



7. Name the gear labelled A

..... 1 mark



b. State which direction gear B rotates when the driver is turned clockwise. Explain your answer.

.....
..... 2 marks

c. State whether gear B will rotate faster, slower or the same speed as the driver. Explain your answer.

.....
..... 2 marks

