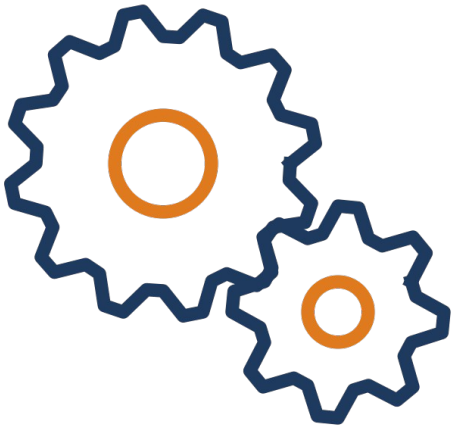
# Lesson D1 Review Questions

## Motion and Mechanisms



Answer every question in your jotter. Show your working. Tap a question below to go to it. Tap **Show answer** under a question to mark it.

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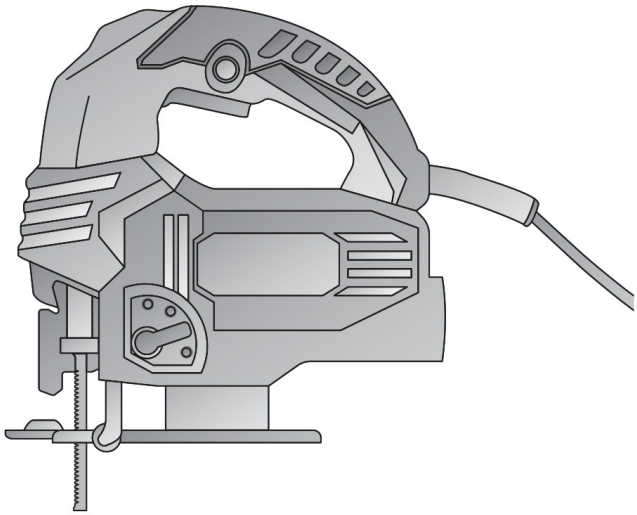



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# Questions

2025 Section 1 Question 5

**1.** A jigsaw used to cut wood is shown.



The jigsaw uses a motor and saw blade in its operation.

Complete the table below for the motion of the motor and saw blade. **2**

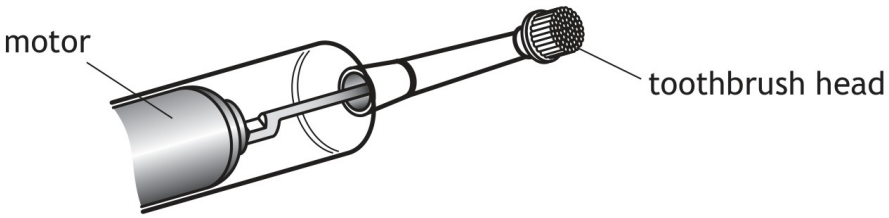
| Part | Motion symbol | Motion name |
|---|---|---|
| motor |  | |
| saw blade | | reciprocating |

Show answer ›



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**2.** The motor and toothbrush head are shown below.




Complete the table below for the motion of the motor and toothbrush head. **2**

| Part | Motion symbol | Motion name |
|---|---|---|
| motor |  | |
| toothbrush head |  | |

Show answer ›



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**3.** Complete the table below which shows the four types of motion. **3**

The first one is completed for you.

| Motion name | Graphic |
|---|---|
| linear |  |
| reciprocating | |
| |  |
| oscillating | |

Show answer ›



**4.** A circus acrobat on a trapeze swing is suspended high above the ground. The motion of the trapeze swing is shown below.



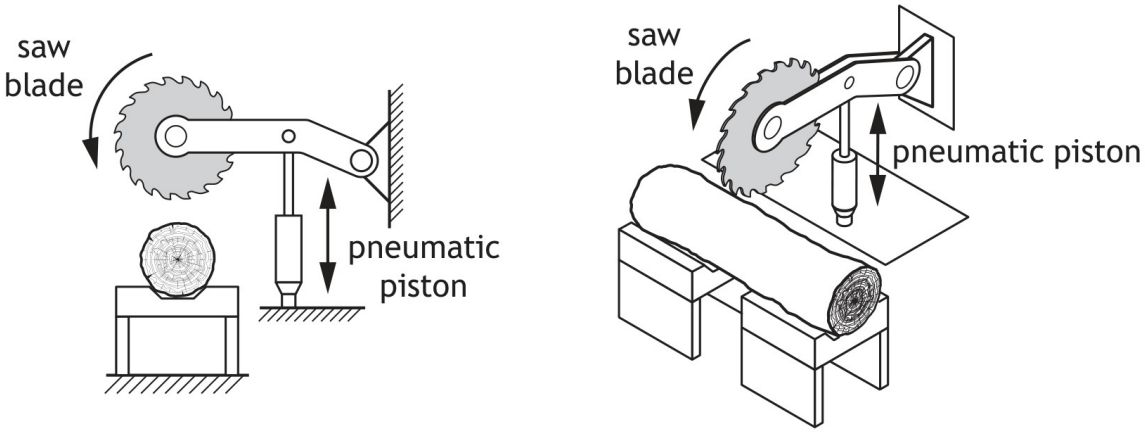
(a) State the type of motion shown. **1**

Show answer ›



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**5.** A pneumatic circuit is used in the operation of an industrial saw.




(a) State, with reference to the diagram above, the type of **motion** shown at the **2**

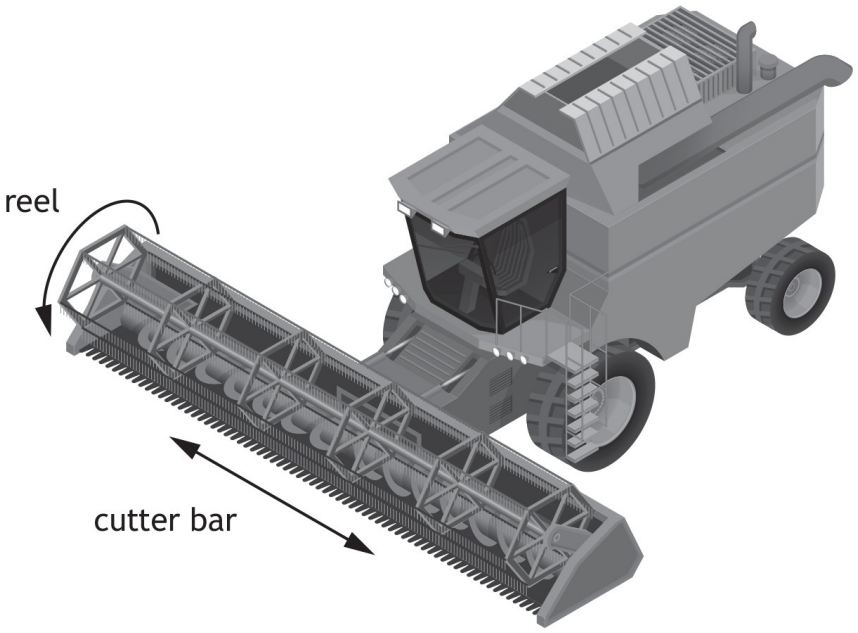
saw blade _____

pneumatic piston. _____

Show answer ›


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**6.** A combine harvester used to gather crops is shown below.




(a) State the type of motion shown above at the: **2**

reel _____

cutter bar _____

Show answer ›



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# Answers

## Check your understanding (booklet)

**1** It changes one type of motion into another, or moves a force from one place to another.

**2** (a) Rotary. (b) Linear. (c) Reciprocating. (d) Oscillating.

**3** A straight line with an arrow head at each end.

**4** Linear motion is in a straight line in one direction. Reciprocating motion is backwards and forwards in a straight line.

### Answer to question 1

2025 Section 1 Question 5

**Marking instructions**

| Question | Expected response | Max mark | Additional guidance |
|---|---|---|---|
| 5. | part / motion symbol / motion name<br>motor / ↻ / rotary<br>saw blade / ↕ / reciprocating | 2 | Accept rotational.<br>1 mark - ↕ or ↔ |

‹ Back to question 1

### Answer to question 2

2026 Section 2 Question 12 (b)

**Marking instructions**

| Question | Expected response | Max mark | Additional guidance |
|---|---|---|---|
| (b) | part / motion symbol / motion name<br>motor / ↻ / rotary<br>toothbrush head / ↻ / oscillating | 2 | **1 mark** for motor rotary motion. Accept rotational/rotating.<br>**1 mark** for toothbrush head oscillating motion. |

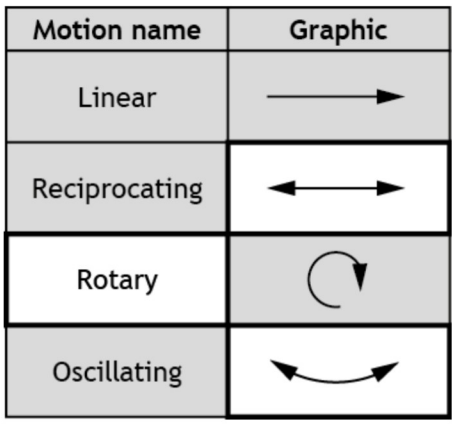
‹ Back to question 2


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## Answer to question 3

2021 Section 1 Question 1

**Marking instructions**

| Question | | | Expected response | Max mark | Additional guidance |
|---|---|---|---|---|---|
| 1. | | |   | 3 | 1 mark for reciprocating graphic.<br>1 mark for rotary (motion).<br>1 mark for oscillating graphic. |

‹ Back to question 3

## Answer to question 4

2018 Section 2 Question 11 (a)

**Marking instructions**

| Question | | | Expected response | Max mark | Additional guidance |
|---|---|---|---|---|---|
| 11. | (a) | | Oscillating | 1 | |

‹ Back to question 4

## Answer to question 5

2019 Section 2 Question 10 (a)

**Marking instructions**

| Question | | | Expected response | Max mark | Additional guidance |
|---|---|---|---|---|---|
| 10. | (a) | | Saw blade: **rotary.**<br>Pneumatic piston: **reciprocating.** | 2 | 1 mark for saw blade motion.<br>1 mark for piston motion.<br>Accept rotational/reciprocal.<br>Do not accept rotating. |

‹ Back to question 5


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## Answer to question 6

2023 Section 2 Question 13 (a)

**Marking instructions**

| Question | | | Expected response | Max mark | Additional guidance |
|---|---|---|---|---|---|
| 13. | (a) | | reel: rotary<br><br>cutter bar: reciprocating | 2 | 1 mark for reel motion.<br>Accept rotational/rotating.<br><br>1 mark for cutter bar motion.<br>Accept reciprocal. |

‹ Back to question 6

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