

Name _____ Date _____

Level 7: An introduction to moments

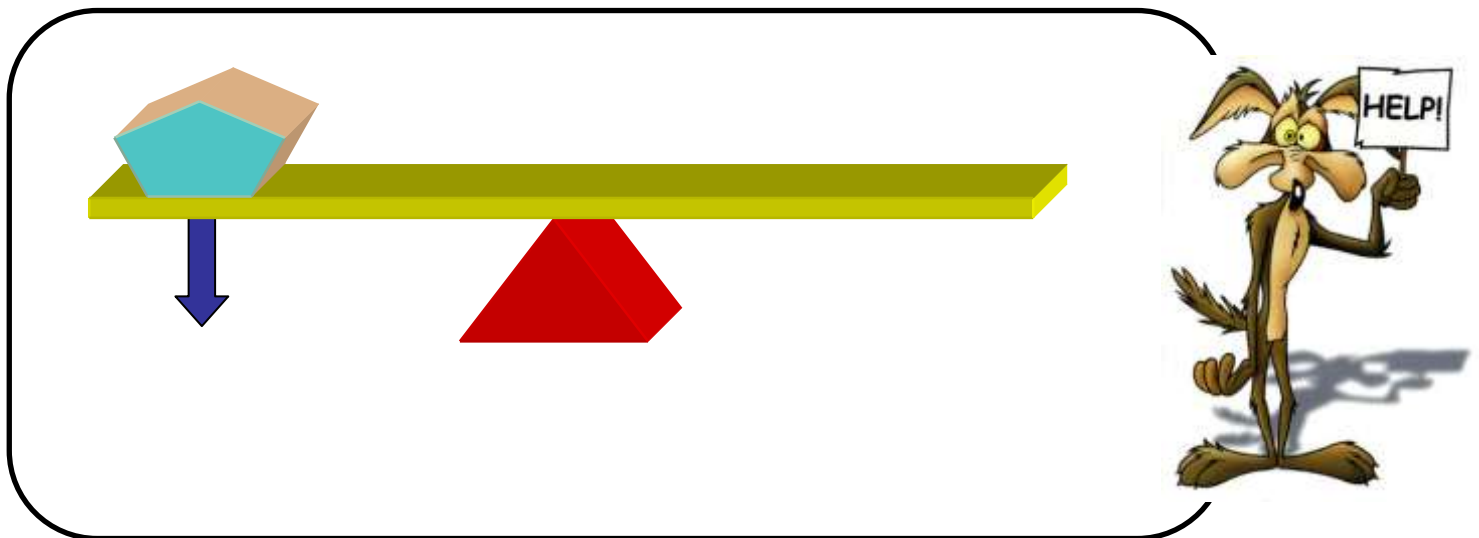
- A **lever** is a simple machine which uses a _____. A pivot is the point around which something _____. We use many levers in everyday life. Some examples are shown below.

Task 1: Label the Pivots



- When a **force** is applied to a **lever**, a **turning effect** called a _____ is made.

Task 2: Label the **force**, the **pivot** and show which direction the see-saw would move.



Task 3: Question time.

- We can **increase** the **size** of the **moment** (the turning effect) in 2 ways. What are they?



- The equation triangle opposite shows how the Moment, Force and Distance are related.

Task 4: Use the equation triangle to work out some simple calculations.

1

10cm

5N

pivot

Calculate the **moment** (turning effect) of the force applied to the see-saw. Give the **units**.

2

5cm

5N

pivot

Calculate the **moment** (turning effect) of the force applied to the see-saw. Give the **units**.

3

10cm

10N

pivot

Calculate the **moment** (turning effect) of the force applied to the see-saw. Give the **units**.

3

Calculate the force at which Wile E Coyote hit the see-saw

Moment = 500Nm

2m

pivot