|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Object** | **Circumference** | **Diameter** |  |  |
| Bike wheel | 178.8 cm | 56.9 cm |  |  |
| Soup tin | 22 cm | 7 cm |  |  |
| Sellotape | 292 mm | 93 mm |  |  |
| London Eye | 377 m | 120 m |  |  |
| The equator | 40,075 km | 12,750 km |  |  |
| The sun\* | 2,717,283 miles | 864,938 miles |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

\* *measured at its widest point*

**Task One: investigating connections**

* Label the fourth column ‘C ÷ d’
* Use a calculator to work out circumference ÷ diameter for each circle. Write down all the figures on the display
* Label the final column ‘C ÷ d to 2 d.p.’
* Round each value to 2 decimal places

**Task Two: using connections**

a) Look for a pattern in your results. Write about what you notice.

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|  |

b) The diameter of a car wheel is 20 inches. What would the circumference of the wheel be?

|  |
| --- |
|  |

c) Work out a **formula** that connects C and d

|  |
| --- |
| C = |

**Finished so soon?**

Measure the diameter of some circular objects. Use your formula to find the circumference of each circle.