

The relationship between π and the features of circles including...

describe the relationship between π and the features of circles including the circumference, radius and diameter

Learning intention

- describe the relationship between π and the features of circles including the circumference, radius and diameter

Teach and model

- recognising the features of circles and their relationships to one another; for example, labelling the parts of a circle including centre, radius, diameter, circumference and...
- comparing the circumference of circles in relation to their radius and diameter with materials and measuring, to establish measurement formulas; for example, using a...
- investigating π as the constant in the proportional relationship between the circumference of a circle and its diameter, and historical approximations from different...

Check understanding

- Explain the main idea in the relationship between π and the features of circles including... using an example.
- Show the idea in a second way: with words, a model, a diagram or symbols.
- Apply the idea to a short unfamiliar situation and justify the result.

Teaching cautions

- Ask the student to explain their choice, not only state an answer.
- Check that key vocabulary is understood in a new example.
- Mix representations so the skill is transferred rather than copied.

Quick lesson sequence

- Connect to prior knowledge and introduce the key vocabulary.
- Model one clear example, then solve a second example together.
- Finish with an independent check and a short student explanation.