

And use combinations of transformations to create tessellations and other...

recognise and use combinations of transformations to create tessellations and other geometric patterns, using dynamic geometric software where appropriate

Learning intention

- recognise and use combinations of transformations to create tessellations and other geometric patterns, using dynamic geometric software where appropriate

Teach and model

- understanding that the Cartesian plane provides a graphical or visual way of describing location with respect to a fixed origin
- understanding that the axes are number lines that can have different scales, including fractions and decimals, depending on purpose
- understanding that the horizontal coordinate is written first and is changed if there is a move to the left or right, whereas a move up or down will change the vertical coordinate

Check understanding

- Explain the main idea in and use combinations of transformations to create tessellations and other... 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.