



# Scaling

## Curriculum connections

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### Australian:

#### Year 5

- Apply the enlargement transformation to familiar two dimensional shapes and explore the properties of the resulting image compared with the original (ACMMG115)
  - using digital technologies to enlarge shapes.
  - using a grid system to enlarge a favourite image or cartoon.

### USA Common Core:

#### Grade 7

- CCSS.MATH.CONTENT.7.G.A.1. Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.

## Lesson Overview

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Students use scaling to reproduce a picture.

## Lesson Objectives

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1. Connect your iPad to a screen so the class can see.
  - Open the teaching document.
  - Define what scaling is and ask students if they can think of places it might be used e.g. maps, architecture etc.
  - Demonstrate how to reproduce the given drawing using scaling.
2. Ask the class to open their worksheet and complete their own drawing using the scale and grids provided (note: drawings will not snap to the provided grid. Students will need to use appropriate precision or approximations).

## Resources

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- iPads with Shape Lab installed
- *Scaling* teacher's document (for demonstration purposes) and class worksheet (to be distributed to iPads and used in Shape Lab).

## Extension

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- Use a more difficult scales e.g. 1:2.5 etc.
- Give measurements (instead of using a grid) and use these to reproduce the drawing on a grid.