



Shaded areas

Levels 3-6

Learning intention

To identify how much of the school is shaded and which areas provide the best UV protection.

Victorian F-10 Curriculum Links Content descriptions

Mathematics (Measurement and Geometry)

Level 3: Create and interpret simple grid maps to show position and pathways.

Level 4: Use simple scales, legends and directions to interpret information contained in basic maps.

Level 5: Use a grid reference system to describe locations...

Mathematics (Number and Algebra)

Level 6: Make connections between equivalent fractions, decimals and percentages.

Introduction

How shady is our school?

Ask students to put their hats on and together take a walk around the school identifying shady spaces, spaces that receive a lot of sun and places that are popular play spots. How shady are they?

- Which areas are already well-shaded?
- Which areas need to have good shade?
- Which areas could have better shade?

Activity

Ask students to draw a map of the school grounds, using graph paper.

Using what they have observed on their walk around the school, ask students to highlight the shaded areas in green and the areas that get the most sun in red.

Calculate the percentage of the school that is shaded versus the percentage of the school that has the highest sun exposure.

Note To scaffold students, give them a pre-drawn map of the school and calculate the percentage as a class or in small groups.

Extension Year 6 students can calculate the fractions, decimals and percentages of the areas shaded and those getting the most sun.

Reflection

As a group, ask the students to reflect on the following:

- Are there any places you could add more shade?
- Are there any shaded areas currently not being used? How could you encourage people to use them?
- Which spots are high UV zones with a lot of sun exposure?

Extension Create an innovative shade design for an area at school.