Chapter 2

## Lesson8 8

You will need

- tenths grids
- hundredths grids
- thousandths grids
- pencil crayons



## Communicating about

 Equivalent Decimals
## GOAL <br> Explain whether two decimals are equivalent.

Stefan has a chocolate bar. Stefan's younger brother, Colin, wants Stefan to share it with him. Stefan tells Colin that $0.5,0.50$, and 0.500 of the chocolate bar are the same amount. Colin wants to know why.

## Stefan's Explanation

I'll use models to represent the chocolate bar, and I'll colour the decimals.

I can model 0.5 on a tenths grid.


I can model 0.50 on a hundredths grid.


I can model 0.500 on a thousandths grid.


The decimals $0.5,0.50$, and 0.500 are equivalent because the same amount is coloured on all three grids.

## Communication Checklist

$\checkmark$ Did you use math language?
$\checkmark$ Did you include the right amount of detail?
$\checkmark$ Did you include a diagram?
A. What did Stefan explain well? Use the Communication Checklist.
B. How can you improve Stefan's explanation?

## Reflecting

C. How did the diagrams help Stefan explain?

## Checking

1. Emily explained why 0.2 and 0.20 are equivalent. Use the Communication Checklist to improve Emily's explanation.

I can model 0.2 and 0.20 on a place value chart. They are equivalent.

## Practising

2. Jeremy and Anna are driving to Peace River with their parents. Jeremy says that they have driven 0.3 of the way. Anna says that they have driven $\frac{30}{100}$ of the way. Explain why they are both right.
3. At the batting cage, Nolan swung at 100 balls. He hit 0.9 of the balls. How many balls out of 100 did Nolan hit? Explain how you know.
4. Taylor turned over the following cards in a matching game. He can keep only the cards that show equivalent decimals. Which card is Taylor not able to keep? Explain.
0.30
0.03
0.300
