

# Number and Algebra:

## Fractions and Decimals: Decimal Disco

### Australian Curriculum

This lesson plan could be used to support the teaching and learning of the following Content Descriptions from the Australian Curriculum.

### Y6: Number and Algebra, Fractions and Decimals
















Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers (ACMNA123)

Multiply and divide decimals by powers of 10 (ACMNA130)

<b>Child-Friendly Aim:</b> To multiply and divide whole numbers and decimals by 10, 100 and 1000.	<b>Success Criteria:</b> I can multiply and divide numbers by 10 by moving each digit one place to the left or right.  I can multiply and divide numbers by 100 by moving each digit two places to the left or right.  I can multiply and divide numbers by 1000 by moving each digit three places to the left or right.	<b>Resources:</b> <a href="#">Lesson Pack</a>
<b>Key/New Words:</b> Decimal point, tenths, hundredths.		<b>Preparation:</b> Differentiated <a href="#">Decimal Disco Activity Sheets</a> – one per child <a href="#">Place Value Grids</a> – as required <a href="#">Disco Lights Self-Assessment Cards</a> - cut up one per child

**Prior Learning:** It will be helpful if the children can multiply and divide whole numbers by 10, 100 and 1000.

### Learning Sequence

	<b>Decimal Dancing:</b> Numbers up to two decimal places are revealed on the screen. If the number is larger than the preceding one, then dance high (arms in the air!) If it is lower, then dance low (how low can you go?). This warm-up game can be played silently or with music.	
	<b>Multiplying and Dividing by 10, 100 and 100:</b> Check that the children remember how to multiply and divide whole numbers by 10, 100 and 1000 using the examples on the <a href="#">Lesson Presentation</a> .	
	<b>The Decimal Point:</b> Explain how to divide by 10, moving across into tenths and hundredths. Remind the children how to read numbers with decimals using the prompts on the <a href="#">Lesson Presentation</a> .	
	<b>Practise:</b> Children work in pairs to multiply and divide by 10, 100 and 1000.	
	<b>Decimal Disco:</b> All groups complete differentiated <a href="#">Decimal Disco Activity Sheets</a> , multiplying and dividing numbers by 10, 100 and 1000.  <b>Can the children multiply and divide whole numbers and decimals by 10, 100 and 1000?</b>	
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Children multiply and divide by 10, 100 and 1000 using a <a href="#">Place Value Grid</a>.</p> </div> <div style="text-align: center;">  <p>Children multiply and divide by 10, 100 and 1000 with increasingly larger numbers.</p> </div> <div style="text-align: center;">  <p>Children multiply and divide by 10, 100 and 1000, including working with numbers beyond a million and completing missing number problems.</p> </div> </div>	
	<b>Disco Lights:</b> The children self-assess their progress and confidence in multiplying and dividing numbers by 10, 100 and 1000, using the <a href="#">Disco Lights Self-Assessment Cards</a> .	

### Explore it

**Checkit:** Children work through this [Mastery Presentation](#) to check their understanding of multiplying and dividing by 10, 100 and 1000.

**Filmit:** Children work in small groups to produce a film to teach others how to multiply and divide by 10, 100 and 1000. They could use animation or act in the film themselves.