Number and Algebra: Number and Place Value: Rounding Records

Australian Curriculum

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

Y5 - Number and Algebra

Use estimation and rounding to check the reasonableness of answers to calculations (ACMNA099) Compare, order and represent decimals (ACMNA105)

Child-Friendly Aim:

I can round decimal numbers to a required degree of accuracy.

Success Criteria:

I can identify which digit to consider when rounding to different degrees of accuracy in a decimal number.

I can identify which digits to round up and which digits to round down in a decimal number.

Resources:

Lesson Pack

Key/New Words:

Round, digit, place value, ten, hundred, thousand, ten thousand, hundred thousand, million, accuracy.

Preparation:

Fraction Action Number Cards - one coloured set cut out and mixed up per group

Differentiated Rounding Records Activity Sheet - per child

Extra Challenge Activity Sheet - as required

Prior Learning:

It will be helpful if children have covered place value of numbers up to 10 000 000 and rounding to a required degree of accuracy.

Learning Sequence



Fraction Action: Give each group a set of mixed up **Fraction Action Number Cards.** Children rearrange their group so that the fractions are in order. Some sets of card will require children to create equivalent fractions so that they have a common denominator.





Rounding Decimals: Introduce rounding decimals, explaining that we can use the same methods to round decimal numbers as we do to round whole numbers. Go through the example shown on the Lesson Presentation. Children choose two of the rounding challenges shown on the Lesson Presentation. Can children round their chosen decimal numbers to the required degree of accuracy? Children can use the diagram on the Lesson Presentation as a scaffold if required. Reveal the answers and discuss any misconceptions.





Athletic Events: Introduce the context of the lesson referring to the athletics events shown on the Lesson Presentation.





World Records: Share the athletics world records shown on the Lesson Presentation. Can children answer the questions by rounding the lengths to different degrees of accuracy? Share and discuss the answers.





Rounding Records Activity: Children complete the differentiated **Rounding Records Activity Sheet** by rounding the lengths to different degrees of accuracy.





Round to nearest whole number and tenth.



Round to nearest whole number, tenth and hundredth.



Round to nearest whole number, tenth, hundredth and thousandth. An **Extra Challenge Activity Sheet** is provided as an extension activity if required.





Althetics Competitor: Children choose an athletics event that they would like to compete in. They roll a dice four times to generate their score. They can use the digits in whatever order they like, but the number must have at least two decimal places. Children round their score to the different degrees of accuracy shown on the **Lesson Presentation**.



Masterit

Askit: Provide children with information on distances between countries and cities around the world, or allow them to find this information themselves. Children create rounding questions using these distances for their partner to solve.

Playit: Give children a rounding target, for example 3000 to the nearest thousand, or 5.6 to the nearest tenth. Children use dice to roll a number, aiming to create a number that rounds to the target.

Measureit: Children take part in their own mini athletics activity. Measure the distance they can jump or throw and challenge children to round their scores to different degrees of accuracy.

