WORK SAMPLE PORTFOLIO

Annotated work sample portfolios are provided to support implementation of the Foundation – Year 10 Australian Curriculum.

Each portfolio is an example of evidence of student learning in relation to the achievement standard. Three portfolios are available for each achievement standard, illustrating satisfactory, above satisfactory and below satisfactory student achievement. The set of portfolios assists teachers to make on-balance judgements about the quality of their students’ achievement.

Each portfolio comprises a collection of students’ work drawn from a range of assessment tasks. There is no pre-determined number of student work samples in a portfolio, nor are they sequenced in any particular order. Each work sample in the portfolio may vary in terms of how much student time was involved in undertaking the task or the degree of support provided by the teacher. The portfolios comprise authentic samples of student work and may contain errors such as spelling mistakes and other inaccuracies. Opinions expressed in student work are those of the student.

The portfolios have been selected, annotated and reviewed by classroom teachers and other curriculum experts. The portfolios will be reviewed over time.

ACARA acknowledges the contribution of Australian teachers in the development of these work sample portfolios.

THIS PORTFOLIO: YEAR 1 MATHEMATICS

Sample 1  Number: Skip counting
Sample 2  Number: One half
Sample 3  Number: Money mind map
Sample 4  Geometry: 2D
Sample 5  Statistics: Our fruit today
Sample 6  Number: I dropped my counters
Sample 7  Number: What is the number?
Sample 8  Number: Growing patterns
Sample 9  Statistics: Familiar events
Sample 10  Measurement: Time
Sample 11  Geometry: Direction
Sample 12  Measurement: Capacity

This portfolio of student work shows an ability to describe the properties of 2D shapes (WS4), represent addition and subtraction (WS3, WS6) and skip count (WS1). The student models and compares representations of a half (WS2) and recognises Australian coins and their value (WS3). The student uses concrete objects to describe locations (WS11) and position, and to continue a pattern (WS8). The student describes, collects and displays data (WS5, WS9). The student uses informal units to order objects based on capacities (WS12), tells the time to the half hour (WS2, WS10) and partitions numbers using place value (WS7).

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Number: Skip counting

Year 1 Mathematics achievement standard

The parts of the achievement standard targeted in the assessment task are highlighted.

By the end of Year 1, students describe number sequences resulting from skip counting by 2s, 5s and 10s. They identify representations of one half. They recognise Australian coins according to their value. Students explain time durations. They describe two-dimensional shapes and three-dimensional objects. Students describe data displays.

Students count to and from 100 and locate numbers on a number line. They carry out simple additions and subtractions using counting strategies. They partition numbers using place value. They continue simple patterns involving numbers and objects. Students order objects based on lengths and capacities using informal units. They tell time to the half hour. They use the language of direction to move from place to place. Students classify outcomes of simple familiar events. They collect data by asking questions and draw simple data displays.

Summary of task

Students were given a number line. They chose a number to start and then demonstrated how they would skip count to reach another number.
Number: Skip counting

Annotations
Demonstrates some skip counting by 5s with some digits transposed and/or reflected.

Demonstrates some skip counting by 3s and then skip counting by 2s.

Shows knowledge of sequence with some reversal of numerals.
Mathematics

Number: One half

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Summary of task

Students were given a number of different items and were asked to show how they would use them to demonstrate one half. They were asked to relate their knowledge of ‘half’ to half-hour time on an analog clock.
Number: One half

Annotations

Folds a triangular object to model one half.

Folds a circular object to model one half.

Confuses the hour and minute hands when asked to show 9 o’clock on an analog clock.

Unable to show time to the half-hour on an analog clock.
Number: Money mind map

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Summary of task

A unit on money and financial mathematics was taught for a period of two weeks in conjunction with number and place value. Students had experienced mind maps and a class shop in other learning areas.

Students selected an Australian coin, described it and identified what could be bought with it. For the second part of the task students were given $1.00 to spend at the class shop and had to calculate as many different combinations of items they could buy as possible.
Number: Money mind map

Annotations

- Traces an accurate representation of an Australian coin.

- Recognises the symbols for plus (+) and equals (=).
Number: Money mind map

Task 3: You have $1 to spend at the class shop. Show as many different ways you could spend your $1.

1. Chips and Milk = $1.00
2. Gingerbread Bred = 70c
3. Ise Blok = 60c
4. Can of Er = 5c
5. Pulp = 50c
6. Capsie = 95c
7. Pile of $1.00
8. Loisiss = 40c
9. Milk = $1.00
10. Cool = 20c
11. Wotri mun = 30c

Annotations

Selects two items to purchase however incorrectly calculates the price.

Recognises the functionality of money.

Recognises the symbols for dollars and cents.
Geometry: 2D

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Summary of task

The students had completed a unit of work on two-dimensional shapes and had been taught how to use the photograph application Comic Touch to apply special effects. Students had completed an artwork for their school art show and they were given a photograph of the artwork and asked to use Comic Touch to record as many things about the 2D shapes and lines that they could. Students were given approximately 30 minutes to complete the task.
Geometry: 2D

Annotations

Identifies rectangles and squares in a picture.
Statistics: Our fruit today

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Summary of task

Students discussed what fruit they had brought to school. They looked at different ways of showing how to describe all of the fruit and were asked to draw the displays.
Statistics: Our fruit today

Data and Graphs

1. Investigate which fruits were brought to school today by our class for recess. Show this using tally marks in the table below.

<table>
<thead>
<tr>
<th>Fruit</th>
<th>Tally Marks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>HHH</td>
<td>7</td>
</tr>
<tr>
<td>Banana</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Orange</td>
<td>HHH</td>
<td>4</td>
</tr>
<tr>
<td>Strawberry</td>
<td>HHH</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>2</td>
</tr>
</tbody>
</table>

2. Show your data on a picture graph. Make sure you include all the information you need.

   Our Fruit Today

   Transfers data from a table into a picture graph but with some errors.
Number: I dropped my counters

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Summary of task

Students were given a bundle of counters to hold in their hand. They were asked to drop some of the counters and then figure out how many were on the floor and how many were still in their hand. They described their results both numerically and with a picture. Some prompts were given to those students who were unable to use any strategies to describe the number of counters they had in mathematical terms.
Mathematics

Number: I dropped my counters

Annotations

Demonstrates limited correspondence between the pictures and the statements.
Number: What is the number?

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Summary of task

The unit number and place value was taught in semester one and two. Students had experienced open-ended problems. Students had experienced this problem previously and understood the language of ‘more’, ‘two-digit’ and ‘pattern’.

Students were given the open-ended problem: ‘A two-digit number has more tens than ones; what could the number be?’

Students had concrete material on the table to access if required. The teacher explained and modelled the task to the students. Students were given 20 minutes to complete the task.
Number: What is the number?

A two digit number has more tens than ones.

What could the number be?
Show how you know your number is correct.

Can you think of other two digit numbers that have more tens than ones?
Show how you know your numbers are correct.
Can you find a pattern?

Annotations

Models numbers with diagrams showing groups of tens.

Understands that two digit numbers are comprised of tens and ones.
Number: Growing patterns

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Summary of task

Students were asked to use objects to continue a given pattern of a number sequence.
Number: Growing patterns

Annotations

Creates a simple increasing pattern using objects.
Statistics: Familiar events

Year 1 Mathematics achievement standard

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Summary of task

Students had been talking about familiar events in their day-to-day lives. They were asked to complete a worksheet linking familiar events and to display their information.
Statistics: Familiar events

1. What time do you get up on school days? __6 o'clock_
2. What time do you get up on weekends? __6 o'clock_
3. What transport do you use to get to school? __car__
   - WALK  
   - CAR  
   - BUS  
   - BIKE 
4. What time do you have dinner? __6 o'clock_
5. What time do you go to bed? __10 o'clock_

From the class results below, draw bar chart of the results. Describe how you compare with the class.

<table>
<thead>
<tr>
<th>Transport</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>WALK</td>
<td>8</td>
</tr>
<tr>
<td>CAR</td>
<td>6</td>
</tr>
<tr>
<td>BUS</td>
<td>5</td>
</tr>
<tr>
<td>BIKE</td>
<td>2</td>
</tr>
</tbody>
</table>

On the diagram colour the columns.
- WALK - RED
- CAR - BLUE
- BUS - YELLOW
- BIKE - GREEN

Annotations

Recognises times but not the context in which the times are relevant.

Demonstrates some understanding that 'walk' has a value of 8.

Demonstrates understanding of what a data display should look like.
Mathematics

Measurement: Time

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Summary of task

Students had completed tasks on telling the time. The students were individually questioned and used a clock to demonstrate their understanding of reading and writing time to the half hour.
Mathematics

Measurement: Time
Geometry: Direction

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Summary of task

Students had been using the language of direction. They were asked to draw a map and indicate a pathway from their classroom to the canteen. They described their pathway using the language of direction.
Geometry: Direction

Take the walking school bus on a tour to the canteen.

Draw a diagram of the way to the canteen.

Label your diagram to show which way the bus turned.

How many turns are there?

How far is it to the canteen?

An annotations

Draws a diagram of a familiar location and labels some landmarks.

Highlights direction of movement using arrows.

Identifies the number of turns following the route.

Identifies the distance travelled using an informal unit of measurement.
Geometry: Direction

Can you show another way to get to the canteen?

Which is the better way to go? Why?

Draws a diagram of a familiar location and labels landmarks.

Justifies and gives reasons about which is the better route.
Measurement: Capacity

Year 1 Mathematics achievement standard

The parts of the achievement standard targeted in the assessment task are highlighted.

*By the end of Year 1, students describe number sequences resulting from skip counting by 2s, 5s and 10s. They identify representations of one half. They recognise Australian coins according to their value. Students explain time durations. They describe two-dimensional shapes and three-dimensional objects. Students describe data displays.*

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Summary of task

Students had been comparing the capacity of different containers. They were asked to describe select two containers from a range of containers in order to show a comparison of ‘more’ and ‘less’ water.
Mathematics

Measurement: Capacity

Annotations

Selects different-shaped containers which makes comparison difficult as the unit of measurement is not uniform.

Describes the amount of water in each container as ‘most’ and ‘little’ but is unable to make an accurate comparison using the words ‘more’ and ‘less’