Sample assessment task

Year level	5
Learning area	Mathematics
Subject	Fractions and Decimals
Title of task	Flag fractions

Task details

Description of task	Students will complete questions based around the fractional amounts of different colours on flags.
Type of assessment	Summative
Purpose of assessment	To assess students' ability to solve problems involving the addition and subtraction of fractions with the same denominator.
Assessment strategy	Written
Evidence to be collected	Question and answer booklet
Suggested time	1 hour

Content description

Content from the Western Australian Curriculum	**Number and Algebra** **Fractions and Decimals** Investigate strategies to solve problems involving addition and subtraction of fractions with the same denominator			
Proficiencies	Understanding	Fluency	Reasoning	Problem Solving
	✓	✓	✓	✓

Task preparation

Prior learning	Students have prior knowledge of: • equivalent fractions • counting and ordering fractions • making connection between fractions and decimal notation.
Assessment differentiation	Teachers should differentiate their teaching and assessment to meet the specific learning needs of their students, based on their level of readiness to learn and their need to be challenged. Where appropriate, teachers may either scaffold or extend the scope of the assessment tasks.

Assessment task

Assessment conditions	This is an individual, in-class assessment.
Resources	Worksheet

Instructions for teacher

Distribute question and answer booklet to students. Discuss booklet and read through questions. Ensure students understand what is expected. Instruct students they will be completing this task individually.

Instructions to students

This task is assessing your knowledge of fractions. Complete each question in the booklet. Show your thinking in the boxes.

1. A flag company is creating a flag that is blue, green and yellow.
   - 4/12 of the flag is blue and 3/12 of the flag is green.
   - Use number sentences to show what fraction of the flag is yellow.

2. Draw what the flag may look like. Can you also draw it another way?

3. If the company needed to make five of these flags, what fraction of the total fabric used is blue?

   Use number sentences to explain your answer and a diagram to support your answer.

4. The flags were packed into boxes of 100. One fifth of the flags were made incorrectly and had to be returned.
   Answer the questions below and use number sentences to show your thinking.
   a) What fraction of the flags were sent back?

   b) How many flags were made correctly?

Sample marking key

Description	Marks
Question 1: Solves a problem involving the addition and subtraction of fractions	
Creates and completes an appropriate number sentence to find the correct answer.	3
Creates and completes an appropriate number sentence to find an answer.	2
Number sentence and answer is inaccurate or incorrect.	1
Subtotal	**3**
Description	**Marks**
Question 2: Provides a diagrammatical representation of a fractional amount	
Creates an accurate representation of the fractional amount stated, where all parts are equal.	3
Creates a representation of the fractional amount stated, where all parts are equal.	2
Creates a representation of the fractional amount stated; however, some parts may be unequal or the representation is inaccurate.	1
Subtotal	**3**
Description	**Marks**
Question 3: Solves a complex problem involving fractions	
Solves the problem correctly, using appropriate and efficient number sentences, and clearly explains reasoning, using fractional terminology.	3
Solves the problem, using appropriate number sentences, and explains reasoning, using some fractional terminology.	2
Solves the problem, using pictures and diagrams.	1
Subtotal	**3**
Description	**Marks**
Question 4: Solves a complex problem involving fractions	
Correctly calculates answer and explains reasoning clearly, using fractional language.	3
Correctly calculates answer, with supporting pictures and diagrams.	2
Calculates answer.	1
Subtotal	**3**
Total	**12**