East Renfrewshire Council: Education Department
Practitioner Moderation Template

Prior to the moderation exercise, please complete the following information and submit it to your facilitator with assessment evidence from one learner that you judge to have successfully attained the Es and Os.

Practitioner Code	S65
Curriculum Area(s)	Numeracy and Mathematics
Level	Second Level
Stage(s)	Primary 7

Experiences and Outcomes:

I have investigated the everyday contexts in which simple fractions, percentages or decimal fractions are used and can carry out the necessary calculations to solve related problems.

MNU 2-07a

I can show the equivalent forms of simple fractions, decimal fractions and percentages and can choose my preferred form when solving a problem, explaining my choice of method.

MNU 2-07b

Learning Intentions:

- To investigate the everyday contexts in which simple percentages are used
- To show the equivalent forms of simple fractions, decimal fractions and percentages
- To carry out the necessary calculations to solve a problem.

Success Criteria:

Please list SC and give brief detail on how learners were involved in their creation.

1. **I understand the meaning of percent and the % symbol**
2. **I can demonstrate that 100% is one whole**
3. **I can investigate everyday contexts in which simple percentages are used**
4. **I can convert percentages to fractions**
5. **I can convert percentages to decimals**
6. **I can convert fractions and decimals to percentages**
7. **I can choose my preferred form when solving a problem**

Briefly outline the context and range of quality **learning experiences** that have been planned making reference to the chosen design principles. Make specific reference to **breadth, challenge & application**.

The children have previously been taught:

- To identify, simplify and find equivalent fractions
- To convert decimal fractions to common fractions

They have had no previous teaching of percentages so this was the starting point. When percentages were introduced I linked this to their prior knowledge of fractions

and decimal fractions.
Breadth –Demonstrated the connection between knowledge of fractions and decimal fractions with the new knowledge of percentages. Opportunity was provided to allow use of these old and new concepts to answer and interpret questions and make links.
Challenge – The children were exposed to a sequence of 6 lessons allowing them to build upon each SC. A wide range of active tasks were used to provide choice and appropriate challenge within lessons. Opportunity was provided to use high order thinking skills to create a game using their new mathematical knowledge of percentages and demonstrate the links they have made with fractions and decimal fractions, they were encouraged to make this as challenging as they wish. They were challenged by playing/completing a game their peers have created.
Application
Through dialogue and observation they could relate their current learning to real life contexts and justify why we need decimal fractions, fractions and percentages, what impact does their use have in the world of work and modern day society.

Record the planned assessment that will be gathered to meet the success criteria (Say, Write, Make, and Do) considering **breadth, challenge and application**.

Write – Carry out calculations choosing preferred method (percentages, fractions, decimal fractions) to answer.

Make – Create matching cards showing different representations of equivalent fractions, decimal fractions and percentages. Have others play and test your game.

Briefly outline the oral/written **feedback** given to the pupil on progress and **next steps**, referring to the learning intention and success criteria.

SC 1&2: You have a wonderful understanding of percentages! Ensure you always use a % symbol in your answer.

SC4: You did very well and converted all of the percentages to fractions. Next time look at the fractions carefully and see if they can be simplified. Always answer in the simplest form.

SC6: Changing the denominator to 100 in a fraction will help calculate the percentage.
Remember if you multiply the denominator always multiple the numerator by the same amount.

SC7: You did really well at question 1 and showed me working of how you calculated the answer, great! I know you found this task tricky and asked to work with a partner. Remember to read the question and select the key information to help you solve the problem.

Pupil Voice:

What have you learned? How did you learn? What skills have you developed?

Conversation was recorded with pupil at the end of the teaching block while completing learning journal and having been reminded of the key teaching points covered.

T: What have you learned?

P: I have learned to explain decimals, fractions and percentages in more ways. I have learned how to use percentages and what you use them for. When people use them. I have learned how much decimals, fractions and percentages impact the world.

T: How did you learn?

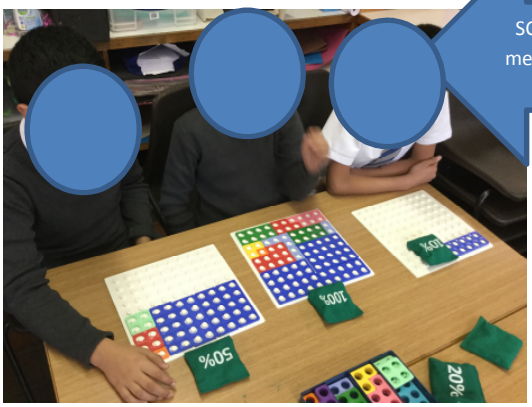
P: We used bean bags, numicon, card games and other useful activities. I liked the worksheets to. I understood more as we went on.

T: What skills have you developed?

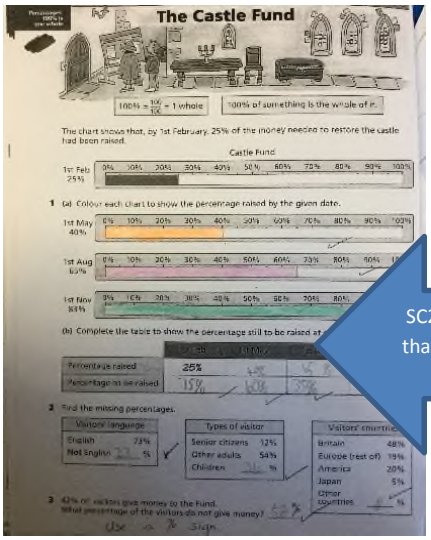
P: I have developed my fraction skills. I have developed an understanding of how decimals and percentages are used in the real world and if I am in shops I will be better at reading labels like 0.60 is 60 pence so I feel more confident dealing with money.

Did the learner successfully attain the outcomes? **YES**

I recognise the pupil would benefit from more experience of answering word based problems.



SC1: I understand the meaning of percent and the % sign.

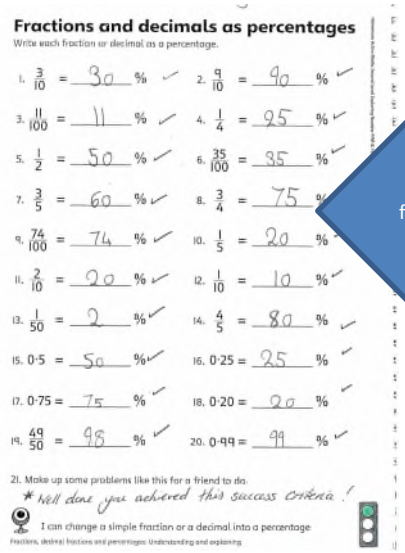


SC2: I can demonstrate that 100% is one whole.

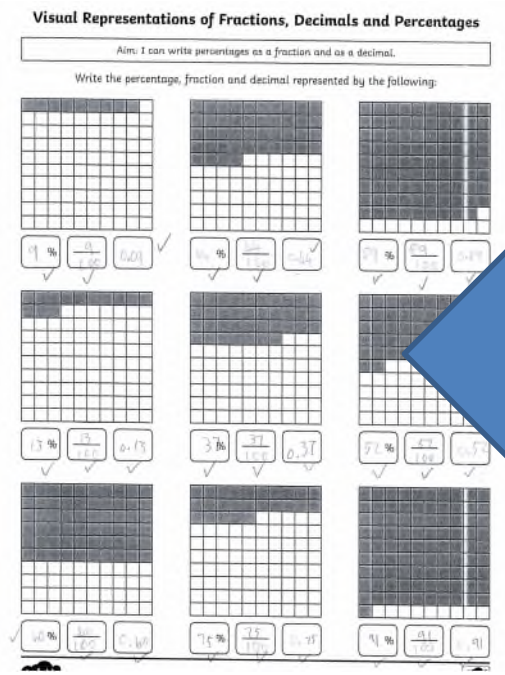
SC3: I can investigate everyday contexts in which percentages are used.
Video Clip: http://www.bbc.co.uk/skillswise/video/percentages

Why learn about Percentages followed by group discussion.
Pupil dialogue:

- I see it on my iPhone when the battery is dropping.
- You see it in shop windows when there is a sale.
- My uncle talks about the percentage he has of his business because he shares it with his cousin.

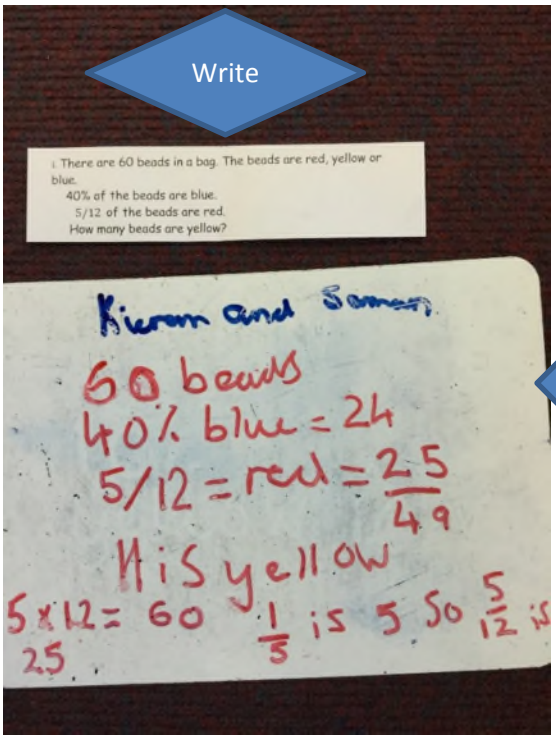


SC6: I can convert fractions and decimals to percentages.



SC4: I can convert percentages to fractions.

SC5: I can convert percentages to decimals.



SC7: I can choose my preferred form when solving a problem.

SC4

SC5

SC6

SC7