

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	S30
Curriculum Area(s)	Numeracy
Level	Second
Stage(s)	P5

Experiences and Outcomes:

1. 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
2. I can manage money, compare costs from different retailers and determine what I can afford to buy. MNU 2-09a

Learning Intentions:

1. To investigate where fractions are used in everyday contexts.
1. To calculate fractions of a whole number
- 1/2. To solve problems in everyday contexts involving fractions by comparing costs from different retailers.

Success Criteria:

1. I can list examples of where fractions are used in the real world.
1. I can divide the whole number by the denominator and then multiply my answer by the numerator.
- 1/2. I can divide the cost of the item by the denominator and then multiply my answer by the numerator to find the discount.
- 1/2. I can subtract the discount from the original price to calculate the new sale price, remembering to include a unit of measurement.
- 1/2. I can compare the different sale prices and select the best deal.

Learners were provided with the Experiences and Outcomes and Learning Intentions. From this, the Success Criteria was negotiated with the learners. Some adult support was provided for the problem solving element.

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**.

- Activity One: Learner will work collaboratively to think, pair, share about where fractions are used in the real world. Following a group discussion, learner will write a list of examples (Making links to the real world).
- Activity Two: Teacher will explain how to calculate fractions of a whole number using EdPax. Learner will practise some examples on a whiteboard and then complete written examples in their jotters to demonstrate their understanding (Application).
- Activity Three: Building on Activity Two, learner will apply their knowledge to

calculate the same item at sale price from different retailers, choosing the best deal (Challenge and Application).

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

1. Write - list examples of where fractions are used in the real world.
- examples of calculations in jotter.
- 1/2 Write - problem solving activity relating to fractions and money.

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

- The learner has written a list of examples of where fractions are used in the real world.
- The learner has successfully calculated a fraction of whole number by dividing the whole number by the denominator and then multiplying the answer by the numerator.
- When solving problems in everyday contexts involving fractions by comparing costs from different retailers the learner was able to calculate the discount by calculating a fraction of a whole number and then subtracting the discount from the original price to calculate the sale price. The learner was then able to compare the sale prices in order to select the best deal.
- The next steps for the learner would be to apply their knowledge and understanding to create their own best deal problems.
- The learner noticed that when calculating $\frac{3}{4}$ of a whole number they could calculate $\frac{1}{4}$ and subtract it from the whole number rather than dividing by 4 and multiplying by 3. This showed good mental agility and awareness of other strategies that could be used.

Pupil Voice:

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

- I found it easy at first as the numerator was always one.
- I found it easy when the numerator changed as there was a rule to follow and I could use this to help me.
- I really enjoyed the best deal activity because I think I could use this to work out the sale price without needing an adult to help me.
- Doing lots of examples helped me to learn and having a rule to follow.
- I liked having one of my group check my answers to the best deal activity and give me feedback. We were happy that we had the same answers.
- I have developed my understanding of fractions and where they might be used in the real world.
- I have also developed my skills when working with money.

Did the learner successfully attain the outcomes?

YES/NO

Activity One



Where would you find fractions in the real world?

Wages - profit sharing among workers eg $\frac{1}{10}$
fundraising event (give $\frac{1}{2}$ to charity)

School
- numeracy
- science experiments
- home economics
- cookery school
- funds shared among classes by quarterming



money - sales
packs of 4 items - $\frac{1}{4}$ them to sell individually
writing - half a page
birthday party
- cutting a cake into tenths for all guests
- making up party bags

Well done! You have successfully identified where fractions are used in the real world!

Activity Two

(a) 5 ✓ (b) 20 ✓ (c) 6 ✓ (d) 6 ✓ (e) 7 ✓ (f) 12 ✓ (g) 15 ✓

(h) $\frac{1}{3}$ of 48 = 16 ✓ (i) $\frac{1}{4}$ of 100 = 25 ✓

(j) $\frac{1}{3}$ of 120 = 40 ✓ (k) $\frac{1}{5}$ of 300 = 60 ✓

(l) $\frac{1}{2}$ of 150 = 75 ✓

Well done! You have successfully calculated fractions of a whole number!

2(a) $\frac{1}{7}$ of 21 = 3 ✓ (b) $\frac{1}{8}$ of 48 = 6 ✓

(c) $\frac{1}{9}$ of 72 = 8 ✓ (d) $\frac{1}{8}$ of 72 = 9 ✓ (e) $\frac{1}{6}$ of 84 = 14 ✓

(f) $\frac{1}{10}$ of 340 = 34 ✓ (g) $\frac{1}{8}$ of 400 = 50 ✓

(h) $\frac{1}{9}$ of 810 = 90 ✓ (i) $\frac{1}{7}$ of 140 = 20 ✓

Activity Two

(k) $\frac{7}{10}$ of 100 = 70 ✓ (g) $\frac{2}{3}$ of 66 = 44 ✓
 (h) $\frac{2}{9}$ of 27 = 6 ✓ (i) $\frac{4}{9}$ of 63 = 28 ✓
 (j) $\frac{3}{1}$ of 44 = 12 ✓ (k) $\frac{9}{10}$ of 80 = 72 ✓
 (l) $\frac{2}{5}$ of 35 = 14 ✓ (m) $\frac{2}{7}$ of 21 = 6 ✓ (n) $\frac{7}{8}$ of 56 = 49 ✓
 (o) $\frac{3}{4}$ of 400 = 300 ✓ (p) $\frac{3}{10}$ of 1000 = 300 ✓
 (q) $\frac{2}{5}$ of 30 = 12 ✓ (r) $\frac{4}{7}$ of 35 = 20 ✓ (s) $\frac{7}{10}$ of 60 = 42 ✓
 (t) $\frac{5}{9}$ of 63 = 35 ✓ (u) $\frac{5}{8}$ of 32 = 20 ✓ (v) $\frac{3}{16}$ of 32 = 6 ✓
 (w) $\frac{9}{10}$ of 200 = 180 ✓ (x) $\frac{7}{100}$ of 300 = 21 ✓
 (y) $\frac{7}{10}$ of 80 = 56 ✓ (z) $\frac{9}{20}$ of 60 = 27 ✓

Challenge
 1. $\frac{1}{3}$ of 18 = 2. $\frac{2}{4}$ of 16 = 3. $\frac{3}{4}$ of 20 = multiplying the answer by the numerator
 4. $\frac{1}{7}$ of 21 = 5. $\frac{2}{3}$ of 27 = 6. $\frac{1}{4}$ of 48 = Super
 7. $\frac{1}{2}$ of 150 = 8. $\frac{2}{5}$ of 100 = 9. $\frac{2}{8}$ of 64 =
 10. $\frac{6}{9}$ of 81 =

Excellent fraction work
 You have successfully
 calculated fractions
 of a whole number
 by dividing the
 whole number by the
 denominator and
 multiplying
 the answer by
 the numerator.
 Super

Great challenge questions
 for a friend to solve ☺

Activity Three

Best Deal Activity One

You have saved up your pocket money and have £10 to spend. You would like to buy a new board game. There are some good deals in the January sales. Calculate the sale price of 'Monopoly' in each of the following stores, showing your working.



Tesco:

Original price - £18

Sale price - 1/2 price

$$\frac{1}{2} \text{ of } £18 = £9 \quad \checkmark$$

$$£18 - £9 = £9 \quad \checkmark$$



Morrisons:

Original price - £15

Sale price - 1/3 off

$$\frac{1}{3} \text{ of } £15 = £5 \quad \checkmark$$

$$£15 - £5 = £10 \quad \checkmark$$



Asda:

Original price - £16

Sale price - 1/4 off

$$\frac{1}{4} \text{ of } £16 = £4 \quad \checkmark$$

$$£16 - £4 = £12 \quad \checkmark$$



B & M:

Original price - £16

Sale price - 1/2 price

$$\frac{1}{2} \text{ of } £16 = £8 \quad \checkmark$$

$$£16 - £8 = £8 \quad \checkmark$$



Best Deal Activity Two

Your Gran has given you some money for Christmas. You want to spend it on a Fitbit. There are some good deals in the January sales. Calculate the sale price of a Fitbit in each of the following stores, showing your working.



John Lewis:

Original price - £120

Sale price - 1/3 off

$$\frac{1}{3} \text{ of } £120 = £40 \checkmark$$

$$£120 - £40 = £80 \checkmark$$



Argos:

Original price - £80

Sale price - 1/10 off

$$\frac{1}{10} \text{ of } £80 = £8 \checkmark$$

$$£80 - £8 = £72 \checkmark$$



Amazon:

Original price - £150

Sale price - 1/2 price

$$\frac{1}{2} \text{ of } £150 = £75 \checkmark$$

$$£150 - £75 = £75 \checkmark$$



Tesco:

Original price - £100

Sale price - 1/4 off

$$\frac{1}{4} \text{ of } £100 = £25 \checkmark$$

$$£100 - £25 = £75 \checkmark$$



Best Deal Activity Three

The PTA have given your class £50 to spend. The class decided to spend it on an Alexa. There are some good deals in the January sales. Calculate the sale price of an Alexa in each of the following stores, showing your working.

Google Store:

Original price - £98

Sale price - 1/2 price

$$\frac{1}{2} \text{ of } \pounds 98 = \pounds 49 \checkmark$$

$$\pounds 98 - \pounds 49 = \pounds 49 \checkmark$$



Currys:

Original price - £72

Sale price - 1/6 off

$$\frac{1}{6} \text{ of } \pounds 72 = \pounds 12 \checkmark$$

$$\pounds 72 - \pounds 12 = \pounds 60 \checkmark$$



Amazon:

Original price - £60

Sale price - 1/5 off

$$\frac{1}{5} \text{ of } \pounds 60 = \pounds 12 \checkmark$$

$$\pounds 60 - \pounds 12 = \pounds 48 \checkmark$$



John Lewis:

Original price - £72

Sale price - 2/3 off

$$\frac{2}{3} \text{ of } \pounds 72 = \pounds 48 \checkmark$$

$$\pounds 72 - \pounds 48 = \pounds 24 \checkmark$$



Which store has the best deal? How much will the item cost on sale?

Activity One: B and M - £8 ✓

Activity Two: Argos - £72 ✓

Activity Three: John Lewis - £24 ✓

You have used the success criteria to successfully compare costs from different retailers.

Peer Assessed by NC

Well done! For your next steps you could create your best deal problems for a friend to solve. 😊

Learning Intentions:

To calculate fractions of a whole number

To solve problems in everyday contexts involving fractions by comparing costs from different retailers.

Assessment of Success Criteria	Self	Teacher
I can divide the cost of the item by the denominator and then multiply my answer by the numerator to find the discount.	●	●
I can subtract the discount from the original price to calculate the new sale price, remembering to include a unit of measurement.	●	●
I can compare the different sale prices and select the best deal.	●	●

Teacher Comment:

Excellent work! You have selected the best deal by comparing the different sale prices. You were able to find the discount by calculating a fraction of a whole number and then subtracted the discount from the original price to calculate the sale price.