

The supermarket supply chain

Key Stage 2 | Mathematics and Numeracy



The Northern Ireland Curriculum

Processes in Mathematics | Number

Money

Pupils should be enabled to:

- use the four operations to solve problems involving money;

Operations and their Applications

Pupils should be enabled to:

- develop strategies to add and subtract mentally;
- know the multiplication facts up to 10×10 ;
- engage in a range of activities to develop understanding of the four operations of number, appreciate the use of brackets, add and subtract with up to two decimal places, multiply and divide decimals by whole numbers, use these operations to

solve problems.

Patterns, Relationships and Sequences in Number

- understand and use multiples and factors and the terms prime, square and cube, appreciate inverse operations;;

Success Criteria

- I can apply multiplication, division, addition and subtraction in real-world contexts.
- I can solve multi-step problems and reason mathematically.
- I can understand how eggs move through the supermarket supply chain.

Key vocabulary

Egg, box, calculate, supply chain, remainder, total, multiply, divide, subtract, profit, value

Resources needed

- Lesson presentation
- Hen to shop activity sheet
- Egg supply chain board game
- Egg supply chain recording sheet
- Egg supply chain pick-up cards
- Egg supply chain instructions
- Dice
- Counters

Prior learning

Children should already be able to: multiply and divide whole numbers, including division with remainders; add and subtract numbers confidently; understand basic fractions and percentages and use reasoning to solve word problems.

Time	Teaching activity	Teacher notes
10 mins	Using the Lesson Presentation , introduce the lesson and ask children the questions on the slide. Demonstrate the calculation.	
15 mins	Organise children into pairs. Give each pair a Hen to Shop Activity Sheet and explain to the children that their task is to solve the egg supply chain problems. Model the first calculation on the board with the children.	<i>Support children that may need it by providing number lines or counters to assist their counting. Mixed-ability pairs may be beneficial for this activity.</i>

Time	Teaching Activity	Teacher Notes
10 mins	If time allows, you may wish to go through the answers to the Hen to Shop Activity Sheet. Explain to the children the Egg Supply Chain Board Game, then model the game to the class with the help of a few children. Organise children into small groups, ideally four per game. Each turn, the children roll a die and move their counter. On each square, they follow the instructions for the square they have landed on and draw a challenge card if instructed. They must solve the problem on the card before moving on. Using the Egg Supply Chain Recording Sheet, children write down each turn and record the running total of eggs and boxes. The game continues until all players reach the end space and the player with the highest total of eggs wins.	<i>Support children to show their working on the recording sheet.</i>
20 mins	Share the reflection questions with the children on the slide and discuss as a class.	<i>Encourage children to use full sentences and key vocabulary. Lower ability children may benefit from having the vocabulary available to them either on the board or on a sheet in front of them. As support, children could be given sentence starters, such as 'I solved this problem by.....'.</i>

Lesson reflections / next steps / teacher notes

Assessment opportunities

- Analyse children's understanding of division and multiplication in the first activity.
- Identify accuracy in calculations and reasoning during the board game.
- Are children able to effectively reason and explain using mathematical language?

Suggestions for future learning

- This could lead into a lesson on percentages and fractions in supply chains.

Home learning opportunities

- Children could create their own board game at home, either focused on the supply chain or a different area.