

TEACHER NOTES

Applying Simple Mathematics to the Railway Environment



Contextual Summary

This is a Number resource that enables students to practise their addition, subtraction, multiplication and division skills.

The task links to specific information about the Isle of Wight Steam Railway that should be interesting and relevant to students in lower key stage 2.

Questions have been chosen because they link with core Mathematics Number skills.

Task Implementation

The skills required for the tasks should be introduced and taught before the visit to the Isle of Wight Steam Railway.

This resource is intended as a 'add-on' activity that would supplement other areas of subject/curriculum-relevant learning within the Isle of Wight Steam Railway environment.

The task could be completed on-site or post-visit.

It is possible for students to complete the questions on-site, gaining an enriched visit experience.

Ability Levels

There is one version of this resource, generally adapted for mixed ability students at lower key stage 2 or P4-P5. These could be adapted further by teachers if required, i.e. for SEN. For example, students could be tasked with answering fewer questions, or perhaps work in teams to find the answers.

Key skills practised in this unit:

- ▶ Addition
- ▶ Subtraction
- ▶ Multiplication
- ▶ Division
- ▶ Problem-solving

Relationship to Curriculum

The above skills are required to be taught and practised as per the Scottish Curriculum for Excellence, and the National Curriculum 2014, for MATHEMATICS/NUMBER at lower key stage 2.

SUBJECT

Mathematics

UNIT

Number

OPPORTUNITIES FOR USE

- ✗ Pre-Visit
- ✓ On-Site Activity
- ✓ Post-Visit
- ✓ Peripheral Task



20-40 Mins

APPLICABILITY



Lower KS2

P4 - P5

CURRICULUM / SYLLABUS

- ✓ National Curriculum 2014
- ✓ Curriculum for Excellence

Applies to Resource Number:

101161

Learning Opportunities

Pre-Visit

The skills should be taught and practised in class prior to the trip so students are aware of the techniques and skills they need to utilise.

During the Visit

Completion of the Mathematics/Number resource/s linked to this document:

Applying Simple Mathematics to the Isle of Wight Railway

Resource ID: **101161** (mixed ability)

Post Visit

Completion of the Mathematics/Number resource/s linked to this document:

Applying Simple Mathematics to the Isle of Wight Railway

Resource ID: **101161** (mixed ability)

- Follow-up tasks could include class discussion about the accuracy/technique used in responses.

Enrichment Opportunities

Opportunities exist for the student to practise using simple maths skills in a more stimulating, real-life situation.

Learning Outcomes

Students will be able to demonstrate, practise and consolidate their simple maths skills, by applying their previously learned skills and techniques.

See Also...

Other resources at Isle of Wight Steam Railway relevant to this age group include:

101113	English	Review and comment
101192	English	Understanding railway texts
101041	Science	Forces
101302	History	The past in the present
101131	History	Chronological Understanding
101071	Science	The power of steam!

For further details visit www.edudest.info and click:

- *Resource Finder* - to locate specific resources identified above
- *Venue Finder* - to learn more about education at this venue
- *Subject Finder* - to find other relevant Isle of Wight venues

Resource Answer Sheet

Can you count?

Answers vary depending on the day of your visit!

Problems (P1)

1. 10 sausages
2. 52 people
3. 6 pushed back
4. 27 pieces of coal
5. 3 months
6. 18 ice creams

Problems (P2)

1. 4 carriages
2. 4 trains per hour
3. a) 4 sweets each b) 2 sweets each c) 10 sweets each
4. 50 passengers
5. 14 levers
6. £18
7. £3 each

Basil Mouse's Counting Picture Challenge (P2)

1. 1 snail
2. 4 prongs
3. 6 slats
4. 4 objects (trowel, plant pot, fork, twine)

