

TEACHER NOTES

Interpreting Railway Data

Contextual Summary

This is a Mathematics/Statistics resource that enables students to practise their problem-solving skills that relate to reading and interpreting data. The task is based on the reading of actual timetables from the Isle of Wight Steam Railway.

As the task links to specific information about the Isle of Wight Steam Railway it should be interesting and relevant to students when they visit.

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

Task Implementation

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.

It is possible for students to complete the questions on-site, gaining an enriched visit experience, however it requires no on-site input.

Ability Levels

There is one version of this resource intended ideally for mixed ability students in upper key stage 2. However, the resource can be adapted by teachers for other ability groups or younger students. Students can be tasked to answer fewer questions, for example.

There are versions for key stage 3 which can be used for stretch and challenge if required.

Key skills practised in this unit:

- ▶ Reading skills
- ▶ Interpretative skills
- ▶ Problem-solving skills
- ▶ Application of addition and subtraction

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/STATISTICS at upper key stage 2.



SUBJECT

Mathematics

UNIT

Statistics

OPPORTUNITIES FOR USE

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



APPLICABILITY



Upper KS2

P6 - P7

CURRICULUM / SYLLABUS

- ✓ National Curriculum 2014
- ✓ Curriculum for Excellence

Applies to Resource number

101151

Learning Opportunities

Pre-Visit

Completion of Mathematics - Statistics: Interpreting Railway Data resource linked to this document:

Interpreting Railway Data!

Resource ID: **101051** (mixed ability)

During the Visit

Students will hopefully be able to employ the skills of timetable-reading they have practised if done as a pre-visit task. They can complete on-site if they wish.

Completion of Mathematics - Statistics: Interpreting Railway Data resource linked to this document:

Interpreting Railway Data!

Resource ID: **101051** (mixed ability)

If completing as a post-visit task, the time spent at the Railway will be practical experience for them to draw on later.

Post Visit

Completion of Mathematics - Statistics: Interpreting Railway Data resource linked to this document:

Interpreting Railway Data!

Resource ID: **101051** (mixed ability)

Enrichment Opportunities

Opportunities exist for the students to also engage with the skills in a practical sense when visiting the Isle of Wight Steam Railway, perhaps helping to plan the journey.

Learning Outcomes

Students will be able to demonstrate an understanding of how timetables work through completion of the problem-solving and interpretative challenge in this task.

See Also...

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

101022	English	10 questions to ask at the railway
101111	English	Review and comment
101182	English	Understanding railway texts
101202	English	Comprehension
101132	History	Chronological order - the railway
101232	History	Investigate the railway!
101141	Maths	Applying mental maths to the railway
101051	Science	Forces
101082	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

Green Timetable

1. 5
2. 5
3. 10:05
4. 16:19 from Smallbrook
5. 9

Blue Timetable

1. Wootton
2. 10
3. 6 minutes

Red Timetable

1. Wootton, at 13:16
2. 15:23
3. 6 minutes
4. 17 minutes

