TEACHER NOTES

FOLLOW-UP ACTIVITY

Number: Formulae

Can you outrun a dinosaur?

Contextual Summary

This is a fun curriculum-based mathematics resource that enables students to practise their solving of formulae and their understanding of how to collate and present data, whilst drawing conclusions from statistics and interpreting their answer to an overall question.

The skills required to undertake the task are core to curriculum areas within mathematics. All link to the 2014 National Curriculum and, in Scotland, Curriculum for Excellence. The resource is aimed at key stage 4 students and could also be completed by key stage 3 students with high ability in mathematics.

The resource links to dinosaurs found on the Isle of Wight specifically, ensuring relevance on the visit for students whilst ensuring the wider curricular relevance is maintained. Questions have been chosen because they link directly with the key curriculum areas.

SUBJECT

Mathematics

UNIT

Number: Formulae

OPPORTUNITIES FOR USE

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

APPLICABILITY

KS3 (Y9) & KS4

S3-S5

CURRICULUM / SYLLABUS

✓ National Curriculum 2014
✓ Curriculum for Excellence

Applies to Resources numbered:

10239 1
10239 2

Task Implementation

This resource is designed to be used when back in the classroom, as a post-visit activity. It uses mathematical processes to determine the hypothetical speed of the dinosaur versus the average speed of the class group. If desired by the teacher, it could also be completed on the local beach near Dinosaur Isle museum, if key apparatus is taken.

This is a peripheral task that links to the key areas of interest within the Dinosaur Isle museum, most notably the dinosaur types found on the Isle of Wight.

However, the skills that can be practised by undertaking the task are directly relevant to the curriculum expectations for key stages 3 and 4.

Ability Levels

There are 2 versions of this resource, one resource for high ability in key stage 3, and one for medium/high ability students in key stage 4. Due to the complexity of the activity and tasks within the resource, it is not suited to low ability students or students in the lower years of key stage 3. The resource can be used by key stage 4 students to practise/compound prior learning or for revision. Resources could be adapted further by teachers if required.

Key skills practised in this unit:

- Practising measuring skills
- Summarising, collating, presenting and interpreting data
- Drawing conclusions from their results
- Applying formulae to a hypothetical dinosaur encounter

Relationship to Curriculum

The above skills are required to be taught and practised as per the National Curriculum, for mathematics key stages 2 and 3.

Learning Opportunities

Pre-Visit

Preparation for the visit.

During the Visit (if apparatus is available - the local beach is a good location)

Completion of the resource linked to this document: *Can You Outrun a Dinosaur?*

Resource ID: 102391 (KS4 med-high ability), 102392 (KS3 high ability)

or Post Visit

Completion of the resource linked to this document: *Can You Outrun a Dinosaur?*

Resource ID: 102391 (KS4 med-high ability), 102392 (KS3 high ability)

Enrichment Opportunities

Students will enhance their understanding of the key processes involved in these data calculations by using a hypothetical dinosaur encounter as a focus for the task, following the visit to Dinosaur Isle museum.

Learning Outcomes

Students will be able to demonstrate their ability to understand the process of working out the answer to the question using various mathematical skills and stages. They will have practised measuring skills, whilst summarising, collating, presenting and interpreting statistic data, ultimately drawing conclusions from their results.

For further details visit **www.edudest.uk** 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