

# Linear functions landmark activitiy

## Examples of pupils' work

### CORNERSTONE MATHS Examples are from

- Investigation 4, Q. 1A "How fast is Shakey going? How do you know?"
- Investigation 4, Q. 1D "Compare the equations of Fast Shakey and Slow Shakey. Describe any differences"
- Investigation 4, Q. 2 "Describe how time, distance and speed are represented..."

#### **CORNERSTONE** MATHS "How fast is Shakey going? How do you know?" (Inv 4, Q.1A)

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- 1. Open Activity 4.1, which shows Shakey the Robot.
  - A. Run the simulation. How fast is Shakey going? How do you know?

& temper treamed. 4 cm/S By a looking at the Data table and seeing now fast he travelled in Iserond.

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    - 1 4 cm/s because every second he goes from as it said in the data table
    - 1. Open Activity 4.1, which shows Shakey the Robot.
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- Which representations are the pupils using to work out the speed?
- How could you use the software (Inv 4) to promote discussion of different strategies?

- 1. Open Activity 4.1, which shows Shakey the Robot.
  - A. Run the simulation. How fast is Shakey going? How do you know?

e 4cm/s 40:10 because he goes 40 cm. h logecome

## **CORNERSTONE MATHS** Compare the equations of Fast Shakey and Slow Shakey..." (Inv 4, Q1D)

D. Compare your equation from Slow Shakey with your equation from Fast Shakey. Describe any differences. Where are these differences shown in the graphs and the tables?

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In the faster snakey the CO-efficient of I is larger. D. Compare your equation from Slow Shakey with your equation from Fast Shakey. Describe any differences. Where are these differences shown in the graphs and the tables?

Record your equations for Slow Shakey and Fast Shakey and describe any differences.

 $\chi$  slow - y = 3.60c + 0. The difference vs 3.6. y = 7.2x + 0.

Where are these differences shown in the graphs and the tables?

- Which differences is it important to focus the pupils' attentions towards?
- How might using the software help?

## **CORNERSTONE MATHS** " "Describe how time distance and speed are represented..." (Inv 4, Q2a)



 How will you use the software to enable pupils to respond to this challenging set of questions?