TORTOISE TRACKERS AT ZSL



(?) Can you spot a small black box on the back of Dirk's shell? (Dirk is our biggest tortoise!)

We are using this device to collect data about what temperatures our tortoises experience and how much ultraviolet light they get.

What is ultraviolet (UV) light?

UV light is a part of natural sunlight that we can not see. Reptiles need UV in order for their bodies to produce vitamin D. Vitamin D is needed to help their bodies use calcium to make the bones of their large skeletons and egg shells!

DID YOU KNOW THAT REPTILES ARE COLD BLOODED?



This means they bask in the sun to warm their bodies up so that they can be active.

The keeper team here at ZSL London Zoo have noticed that the tortoises behave differently and use different parts of their enclosure depending on the time of year and what the weather is like.



Use the space below to make your predictions of tortoise behaviour.

On a warm sunny day the tortoises are likely to be where and doing what? (hint: think about how active the tortoises might be, where they might choose to be etc.):

Prediction:

Reasoning? ____

On a cold cloudy day the tortoises are likely to be:

Prediction:_____

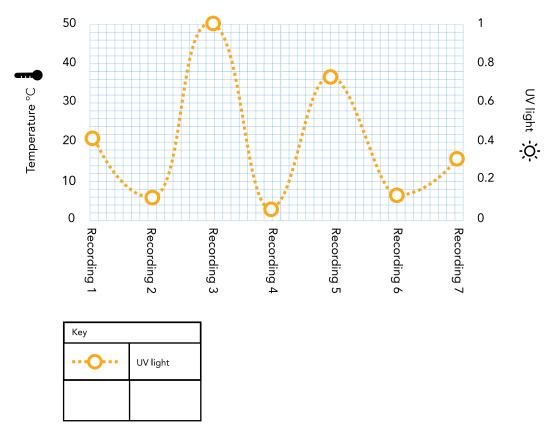
Reasoning? _____







The graph below has 7 recordings of temperature and 7 recordings of UV light taken from the tracker on Dirk's shell.





Read the UV data points from the graph above and record them in the table below. Now plot the temperature data from the table below into the graph above and draw a line connecting the points using a coloured pen (make sure to complete the graph's key).

	Recording 1	Recording 2	Recording 3	Recording 4	Recording 5	Recording 6	Recording 7
Temp °C	37	26	43	25	35	26	30
UV light							

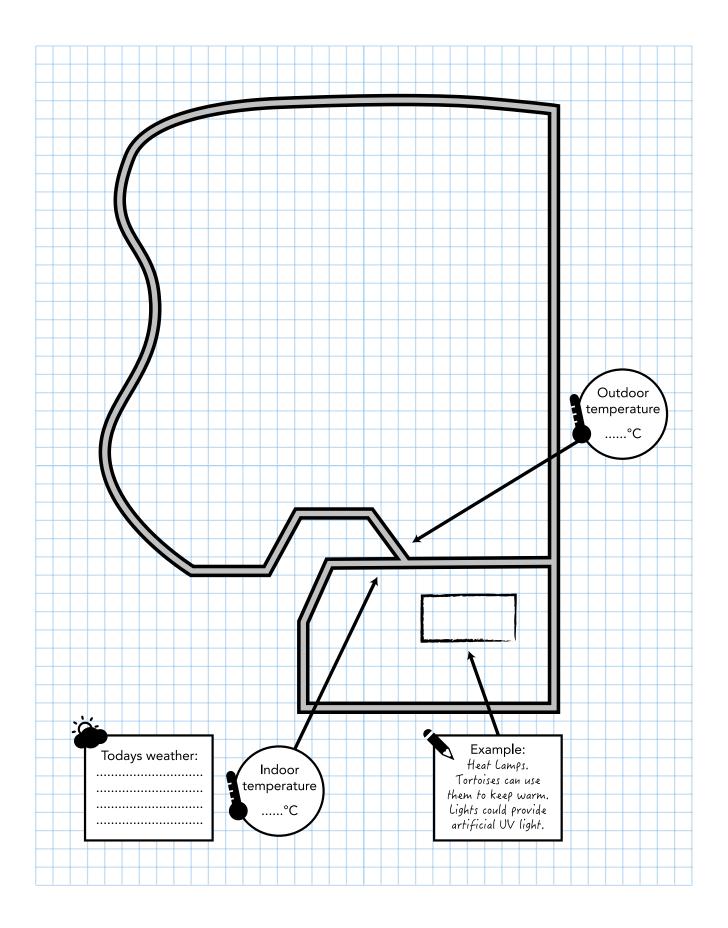
TASK 3 What conclusions can you draw from the logger data?

The recordings were taken at night and during the day. Circle the recordings on the table that you predict have been taken in the day time.

Which of the day recordings do you think may have been taken on a cloudy but warm day?

TASK 4

Using colouring pencils complete the aerial view diagram of the tortoise's ZSL home. Be as accurate as you can and make notes explaining why you think the feature is there.





Mark on the diagram (on page 3) where each of the tortoises are today and make a note next to it what they are doing. Use the space below to explain your ideas of why the tortoises are behaving the way they are.

Do you think the enclosure meets the needs of our tortoises? How does it compare to the tortoises' habitat on the Galapagos Islands?

Can you suggest any ways ZSL could improve the tortoises' zoo enclosure? Why?

