Please refer to Worksheet Template Icon Key v0.1 for symbols above

"Hello from the 5000mileproject! On 27th July 2012, we will fulfil a dream expedition and the biggest challenge of our lives, to run the length of South America, unsupported, in a year!! Running 15 to 25 miles per day, over 5000 miles; it will be the equivalent of over 200 marathons and we will pull our food, water and equipment. We are both Ecologists and will also be carrying out the world's longest wildlife survey ("Mega Transect") and raising money for BirdLife International and Conservacion Patagonica. We want to share the amazing wildlife and wild places we see, hear and smell along the route with you, so come and join us at www.5000mileproject.org……….!", Katharine and David

Click this Link to show your Class a 2 minute film about the project:
http://www.5000mileproject.org/2012/05/promovideo/

Teacher PART A - Guidelines

WORKSHEET GOALS

In this worksheet pupils will learn about planning a schedule to ensure they can meet a deadline. They will follow us on the road and make sure that we are on-time to make our satellite phone call to you and get all the running we need to do that day completed. Pupils will also consider that time has been adjusted in different parts of the world and learn to make a simple translation across time zones

Mapping to Syllabus
- Ma3 Shape, space and measures - Understanding measures
- Ma2 Number and algebra - Solving numerical problems

At the end of this worksheet, pupils will
- be able to identify which factors will contribute to their schedule
- be able to work backwards to identify when they need to leave a certain point to be ontime using simple subtraction
- understand that an adjustment can be made to a time for people in different parts of the world

NEEDS AND RESOURCES

Required Background

To successfully complete this worksheet, pupils must
- understand time on a clock
- understand that the world is a sphere and different countries have different timezones

Required Materials

To successfully complete this worksheet, pupils will need
- no additional material essential
- it would be useful to have a picture of the globe

Additional Print Resources
- Not Applicable

Online Resources
- Not Applicable

Teacher PART B –Answers

Activity 1

Anything goes, but pupils should be encouraged to at least consider the distance we need to travel, the speed at which we travel and the time that we need to be there. If they could also start to imagine that there are other things involved too, like packing up camping equipment, which effects the overall schedule they will become even better prepared!

Activity 2

1. 25/5 = 5 hours

2. 3pm minus 1 hour to set up = 2pm

   2pm minus 5 hours = 9 am

Activity 3

Either 9am minus 4 equals **5am,**

Or

3pm minus 4 hours = 11am, minus 1 hr for setup minus 5 hours for running = **5am**

INFO

Katharine and David's route across South America will take them over many different roads, tracks and mountain paths. They are not only running, they will also will be answering your emails and making calls on their satellite phone from the roadside to catch up with you. They need to plan their time carefully.

Can you help David and Katharine plan their schedule today?!

Stuff you'll learn

☑ How to plan your schedule back from a particular time when you need to do something

☑ That because the earth is round people live in different timezones

Activity 1

Planning a Route for the 5000 Mile project

Today we are going to run across the Andes mountains and you are going to help us! We have an appointment to make a call to your school on our satellite phone from the roadside before home-time. We need to plan our route so we have enough time to set up all of our camping equipment and power up the telephone.

To plan our running day can you think of three pieces of information we will need to know?

_____

_____

_____

Activity 2

For our run today we will use the following information:

- Distance we need to run today . . . **25 miles**

- Time it takes to set up our equipment . . **1 hour**

- Time we need to make the call . . . **3pm**

- Our average running speed on the mountains . **5 miles per hour (mph)**

From this can you can help us work out **when we need to leave** (all our gear must be packed up and ready to go)

Guanacos grazing, Chile

1. How long will the running part take us?

   _____

2. What time will we need to start running to arrive **on time** to make our call?
   (show your working)

_____

Activity 3

If you have time, let us think about time differences that we must take into account:

David and Katharine are in South America and you are in your home country. The world is a sphere that is spinning and the sun can only shine on part of the world at one time. Different countries, therefore, use different **time zones** in order to have their daytime when there is daylight from the sun. We have different time to you.

For this example let us assume that in your country you are **4 hours AHEAD** of us (e.g. if it is 10pm where you are it is 6pm where we are).

Can you adjust your answer above to tell us what time should we set off?

_____

Student's Page 2