The Queen's Diamond Jubilee Pigeon Race

Learning objectives

- To understand how a pigeon race is won.
- To understand how time, distance and speed/velocity works.

Challenge 1

Observe the following video clip.
http://flyingbacktonature.com/?p=42

Paired Assessment Activity

Discuss with your partner and record your responses.

1. Can you explain how the pigeon race works?
2. Where was the starting point of the Queen's Diamond Jubilee Race from?
3. Where was the finishing point for the race?
4. Can you explain how to find out which pigeon has won the race?

Answers

1. The Pigeon Race (differentiation - less able could sequence the bullet points below).
   - The race starts when all the birds are let out of the race baskets.
   - The liberation time is recorded.
   - The racing pigeons race home as fast as they can.
   - The racing pigeons arrive home and the fancier records the time of arrival in a special pigeon clock.
   - The pigeon with the highest average speed/velocity wins the race.
2. Fougeres, France. (Find the location in Google Earth).
3. At each pigeon fanciers loft. (All lofts have their own latitude and longitude and distances are calculated between each loft using the great circle method. In the resource pack there are the instructions of how to calculate Latitude and Longitude between two loft locations. I have enclosed a spreadsheet call Great Circle Calculator. Google Earth is used to calculate loft locations and the Latitude and Longitude result is converted from the WGS84 datum to the OSGB36 datum. In the UK the OSGB36 datum has always been used but Google Earth provides such an excellent resource for pigeon fanciers that we can simply convert from WGS84 to OSGB36. This opens up an extension geography activity. If you wish for any further help with this enquiry email peter@humphries.com) I have attached the information as you will see pigeon racing provides fascinating investigations.
4. Pupils need to know the flying time (start to finish) and the distance between the liberation point and loft, in order to work out the average speed of the racing pigeon. The pigeon recording the fastest velocity will win the race.

Which pigeon fancier has the fastest racing pigeon?

Name Race Point Miles Yards

Using the data above

1. If you travel 60 miles in 1 hour how fast will you be travelling?
2. If you travel 60 miles in half an hour how fast will you be travelling?
3. If you travel 60 miles in 2 hours how fast will you be travelling?
4. Which example 1, 2 or 3 has the fastest speed?
5. Which example 1, 2 or 3 has the slowest speed?

Double click on the spreadsheet above and then amend the excel spreadsheet.

Change the distance.
Change the time.

What happens to the speed when the distance increases?
What happens when you decrease the flying time?

Extension

Investigate how the spreadsheet has been constructed. What formulas have been used to make the calculations?

Using real data and amending a spreadsheet

1. Using the data in table 1 below, double click the table above and amend the spreadsheet by adding the names and the correct data.
   How can you speed your work up and reduce making mistakes?

2. Data sort the table on the velocity column from highest to lowest and you will find out the order of the birds.

Table 1

Pigeon Fancier	Distance Miles/Yds	Liberation Time	Time of arrival	Actual Flying Time
E R Her Majesty The Queen	318/1356	07:10:00	13:10:57	06:00:57
F Bristow	317/1445	07:10:00	12:32:25	5:22:25
D & J Hawkins	361/ 560	07:10:00	13:16:44	6:06:44
Mr & Mrs G. Butts	255/1208	07:10:00	11:28:48	04:18:48
R & B Smith	358/707	07:10:00	13:53:47	06:43:47
J A Hamplett	311/1205	07:10:00	12:39:22	05:29:22
Mr & Mrs N Bridgwater	281/928	07:10:00	14:28:29	07:18:29
Ron Fullbrook	251/474	07:10:00	11:17:20	4:07:20
H P Hamplett	312/929	07:10:00	12:48:19	05:38:19

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
M Yates & Son	297/1018	07:10:00	12:33:57	05:23:57

Which pigeon fancier had the highest placed bird from these results?
Which pigeon had to fly the shortest distance?
Which pigeon had to fly the longest distance?
What are the possible reasons why some birds make the journey faster than others?

Investigating the actual result Click to Open

1. How many birds were entered in the race?
2. Can you identify the winning bird?
3. What was the story of the winning birds?
4. Which position did The Queen's racing pigeons finish in the race?

Would you like to enter a pigeon race?

Your school can apply for a free application into the Royal Pigeon Racing Association one loft race. You can follow your pigeons progress on their website. You can arrange a visit to meet your racing pigeon. Your bird can win prizes for your school. To register your school for a free entry into the RPRA one loft race email:
Need to check with Future of the Sport committee.

Would you like to have homing pigeons at school?

Watch the following clip from Kingsmead School, Staffordshire.
http://www.bbc.co.uk/news/uk-england-stoke-staffordshire-21197477
You will be able to get sponsorship and help to set up this project free for your school. If you would like further information on how to go about this contact Richard Chambers at Kingsmead Technology College Kings Avenue, Hednesford, Cannock, Staffordshire, WS12 1DH **Tel:** 01543 512455 www.kingsmead.staffs.sch.uk