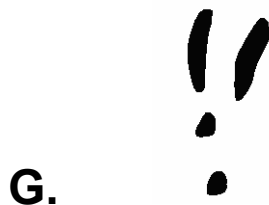
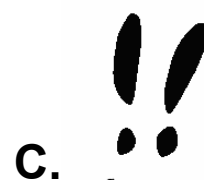
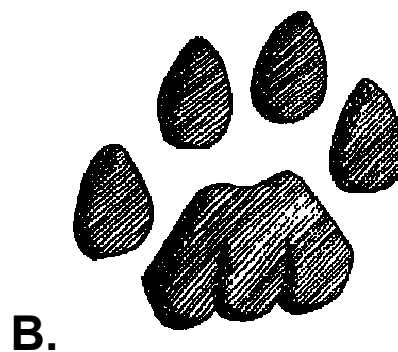


Let's compare Feet!

TASK 1A

Can you match the footprints to the animals?

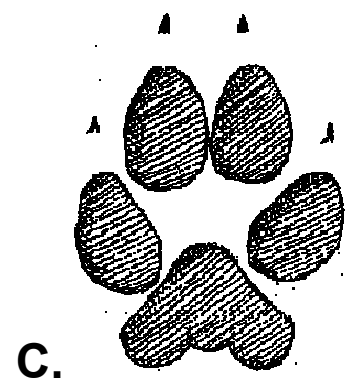
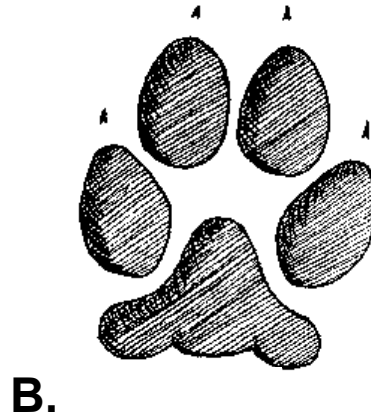
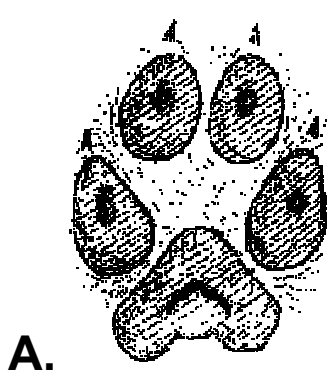
ANIMALS: 1. Rabbit 2. Child 3. Black Bear 4. Raccoon 5. Lion
 6. Dog 7. Squirrel 8. Cat 9. Deer



TASK 1B

How about these 3?

1. Wolf	2. Fox	3. Coyote
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Explain why this task is a lot harder than task 1A.

How did you find out which print matches which animal?

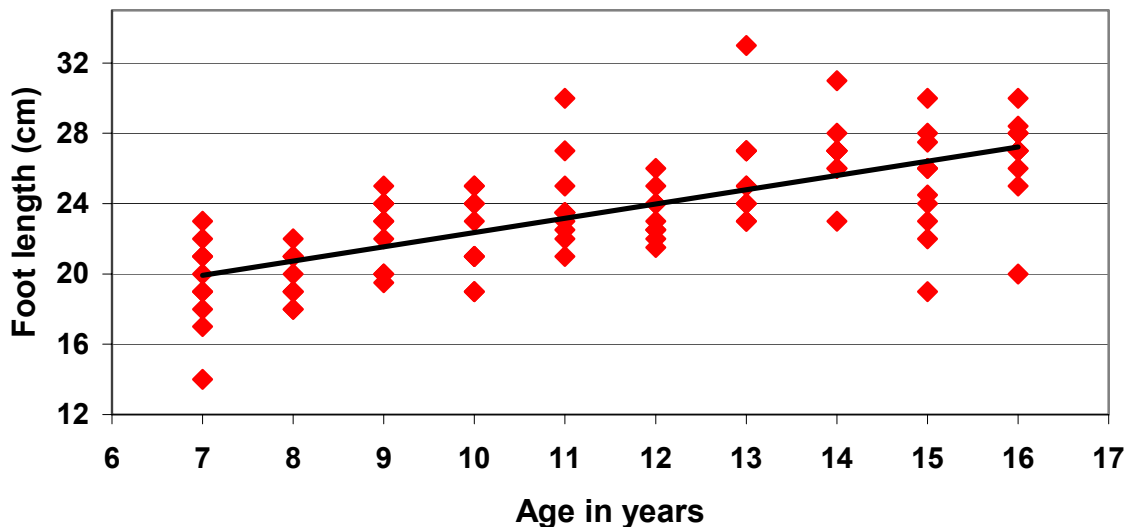
What kind of people may be able to do this?

TASK 2

Does Foot length increase with age?

Here is some data from 100 children who took part in Phase 3 of **CensusAtSchool**

Scatter Graph Footlength v's Age



What conclusions can you draw from this graph?

What does the line on the graph mean?

The equation of this line is $y = 0.8x + 14$. Explain what this equation means.

Using the equation, work out the average foot length for

- a) a 12 year old b) an 18 year old c) a 40 year old.

Which of your answers is wrong? Explain why.

Thinking about what a line of best fit is meant to show, do you agree with how the line has been drawn? Draw your own estimate on the graph.

Either, using data from your class, or the data given on the reverse, draw a similar scatter graph showing males and females in different colours.

Do males and females have any differences in foot length?

Data source Phase 3 *CensusAtSchool* 2002/3

Gender	Years old	Foot length (cm)	Gender	Years old	Foot length (cm)	Gender	Years old	Foot length (cm)
F	14	23.5	F	13	28	F	8	14
F	14	24.5	M	14	25	F	14	20
F	12	23	M	12	30	M	10	20
F	13	26	F	12	23.5	M	12	22
F	14	21	F	13	23.1	F	14	25
M	11	22	M	15	29	M	13	27.5
F	15	24	F	10	19	F	13	22
M	9	22	F	11	22	M	11	24
F	13	20	M	11	21	M	10	21
F	12	23	M	15	27	M	13	24.5
M	14	24	M	15	24	F	12	23
M	9	25	F	14	22.5	F	14	22
F	9	20	M	10	24	M	9	18
M	14	30	M	14	26	F	12	24
F	11	21	F	11	25	F	15	28
M	12	21	F	11	9.5	F	13	24
M	11	21	M	12	24	F	13	21
F	14	20	F	13	29	M	13	25
F	10	21	F	16	23	M	14	34
M	11	23	F	10	25	M	11	20
M	12	29	F	16	20	M	13	25
M	11	20	F	14	22	F	13	23.5
M	15	24	M	11	23	M	15	30
M	14	28.7	F	8	23	F	12	22
M	15	29	F	13	23	F	15	22.5
F	14	24	F	9	20	F	13	27
M	12	23	M	14	25	F	13	24
F	13	24	M	14	24	F	13	24