CREEPY CRAWLIES PROBLEM SOLVING

What you will need:

- paper and pens
- calculator (optional)
- a partner (optional).

What to do:

1. Read the Creepy Crawlies text below and clarify your understanding.
   What is the task asking you to do?
2. Record your thinking and answers in a logical way. You might want to include drawings, lists, tables, graphs, etc.
3. Justify your thinking. What numeracy skills did you use? eg doubling, multiply, etc.
   What problem solving strategies did you use? eg draw a diagram.
4. Explain your thinking to someone in your house.

Taking the learning further:

5. Literacy Extension:
   a. What do you notice about the words in this task?
   b. Are there any words that you don’t know? Find the meaning of these words.
   c. What did you notice about the professor’s name?
   d. Highlight, circle or underline 4 interesting words from the task.
   e. Use these four words to write a short story.
What learning is happening:

• learning to apply problem-solving strategies
• using numeracy to solve problems
• justifying thinking using mathematical language.

Links to more information:

• Information about problem solving strategies -
  https://www.projectmaths.ie/workshops/workshop3/ProblemSolvingPosters.pdf
  https://nzmaths.co.nz/problem-solving-strategies

• Online Dictionary - https://kids.wordsmyth.net/we/

• Learning at home on the Department of Education website

Creepy Crawlies

Professor Bunsen, the mad scientist, has a collection of beetles and spiders in a specially humidified translucent container. The floor sensor in the laboratory tells her that there are six less than 180 legs altogether in the container. The infra-red detector tells her that there are four less than 30 bodies in the container.

In the laboratory down the corridor, another scientist, Doctor Von Krankenshaft, has a similar container but it contains lizards and beetles. The floor sensor in Doctor Von Krankenshaft’s laboratory tells him there are four lots of 41 legs in his container and the infra-red detector tells him there are nine less than 40 bodies.

Which scientist has the most beetles in their container? How do you know?