



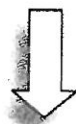
Problem Solving – 4 Steps

1. **See & Understand:** Do I understand what the problem is asking?

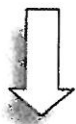


2. **Planning:** Select a strategy, or strategies from the list.

Plan how you intend solving the problem.



3. **Doing:** Try your idea



4. **Check It:** Did it work?

If so, reflect on the strategies you chose to use.

If not, go back to Step 1.
Ask for help if you need to.

Problem Solving Strategies

Make a table

4 legs	2 legs	no legs
cat	boy	snake
dog	emu	

Make a list

- 4 dogs
- 3 cats
- 7 rabbits

Draw a picture/diagram



Act it out



Make a model



Identify a pattern

5, 10, 15, 20

Write a number sentence

$$3 \times 4 = 12$$

Solve a simpler, related problem

102, 104, 106
2, 4, 6, 8, 10...

Guess and Check



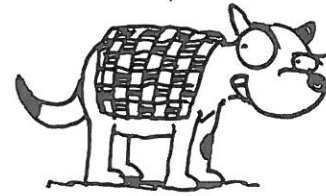
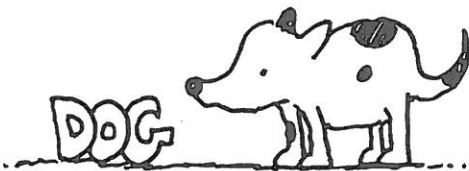
Work backwards



THE NINE PROBLEM SOLVING STRATEGIES

1. Find the important words in the question

- @ Underline them.
- @ Write them down.
- @ Read them a few times.
- @ Make sure I know what I have to do.



2. Look for a pattern

- @ Is there a similar thing happening over and over again?
- @ Will finding this help me solve the problem?

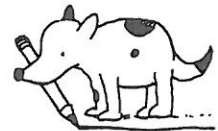


3. Guess and check

- @ Think of a possible answer.
- @ Try and see if it works.
- @ Does the answer make sense?

4. Make a table or chart

- @ Will something like this help me?
- @ Will it help me to see a pattern?



5. Make a drawing

- © Can I draw about the problem in some way?
- © Will a sketch help me see what needs to be done?



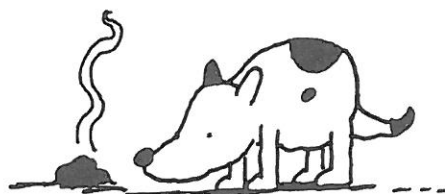
6. Work backwards

- © If I start at the end of the problem and work backwards, will it help?
- © When I do this, does my answer work?



7. Try a similar but easier problem

- © What is the same about these two problems?
- © Can I use this to help me with the harder problem?
- © Can I see a pattern?



8. Make a model

- © Will a model made out of paper help me to solve the problem?
- © Will a model made from blocks help me to solve the problem?



9. Think clearly

- © What do I already know about the possible answer?
- © What must the answer look like?
- © What answers obviously do not work?

