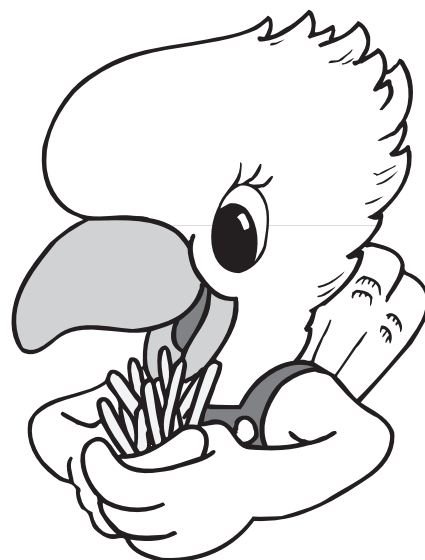




Solving a simpler problem

Match-boxes

How many matches are needed to make 6 squares in a row?



Solution

Solving a simpler problem is one way to find the answer.

One square needs 4 matches.

The next square only needs 3 more matches, making 7.

Each new square needs 3 more matches.

For 6 squares, the total number of matches needed is $4 + 3 + 3 + 3 + 3 + 3$.

That's 19 matches altogether.

1 Guessing and checking	6 Checking for useful information
2 Making a table, chart or graph	7 Finding smaller parts of a big problem
3 Drawing a picture or making a model	8 Making an organised list
4 Acting out the problem	9 Solving a simpler problem ✓
5 Finding a pattern	10 Working backwards



Solving a simpler problem

Have a go!

How many matches are needed to make 6 matchstick-houses in a row?



1 Guessing and checking	6 Checking for useful information
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Problem Solving Tasks

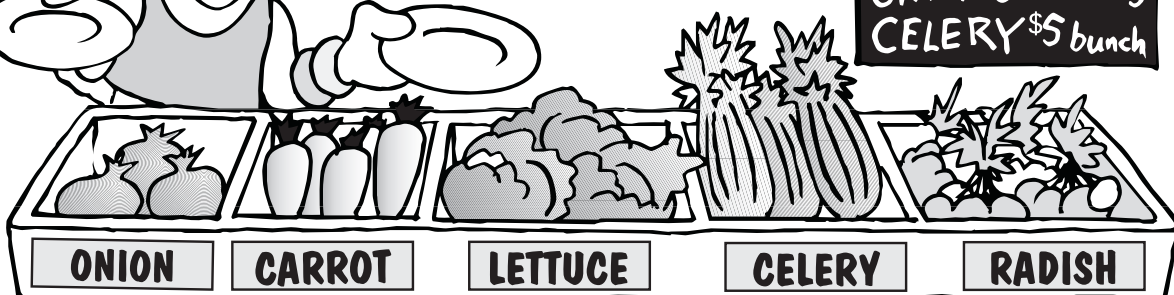
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Salad selection



I can choose two vegetables for my plate. List **all** the different pairs of vegetables possible.

PRICES	
CARROTS	\$3 a bag
RADISH	\$6 a bag
LETTUCE	\$3 each
ONIONS	\$4 a bag
CELERY	\$5 bunch



ONION and CARROT			
ONION and LETTUCE			
ONION and CELERY			
ONION and RADISH			



What if Marcie could choose **three** vegetables for her plate? List all the different combinations.

1 Guessing and checking	6 Checking for useful information
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— Problem Solving Strategies and Tasks —

JIGSAW MATHS 3 PROBLEM SOLVING TASK CHECKLIST

Task	Which strategies used?	Completed and checked (✓)	Task	Which strategies used?	Completed and checked (✓)
1 Bulls-eye			21 Strip snip		
2 Tock tower			22 Fifty-cent total		
3 Add to sixty			23 Money matters		
4 Stack-up			24 Three-way weigh		
5 Something fishy			25 One hour		
6 Beyond a hundred			26 Who is tallest?		
7 Add to 96			27 Five coins		
8 Frogs and toads			28 Cubby-house cost		
9 Leftover lollies			29 Make a date		
10 Seashells and starfish			30 A square metre		
11 Pattern builder			31 Salad selection		
12 Ten tables			32 Swimming races		
13 Squares make squares			33 Roll the dice		
14 Favourite shapes			34 Tug of war		
15 Travel backwards			35 Equal stacks		
16 Tessellating tiles			36 Fishing prize		
17 Trembling tower			37 Double scoop		
18 All fall down			38 Sandwich selection		
19 Squares in steps			39 Three dice		
20 Equal parts			40 Never say die		

The strategies are numbered to help you in completing the **Which strategies used?** box in the Task Checklist above. Simply write the numbers of the strategies you used in the space next to the task. Your teacher will tick (✓) the problem when it has been completed and checked.

1 Guessing and checking	6 Checking for useful information
2 Making a table, chart or graph	7 Finding smaller parts of a big problem
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5 Finding a pattern	10 Working backwards