## Use a Table



## Can organising

 information into a table make it easier to understand?

Oliver's Sandwiches

| Bread <br> Type | 1 filling | 2 fillings | 3 fillings |
| :--- | :--- | :--- | :--- |
| white | 1 ham | 2 ham + cheese <br> 3 ham $\phi$ tomato | 4 ham, cheese $\psi$ tomato |
|  | 5 cheese | 6 cheese $\phi$ tomato |  |
|  | 7 tomato |  |  |
| brown | 8 ham | 9 ham $\phi$ cheese <br> 10 ham $\phi$ tomato | 11 ham, cheese $\psi$ tomato |
|  | 12 cheese | 13 cheese $\phi$ tomato |  |
|  | 14 tomato |  |  |

Sometimes if you organise your information into rows and columns, you can see all the possibilities.

## The Problem: Oliver made sandwiches to sell and

 raise money for his school camp. He used white bread and brown bread with ham, cheese and tomato fillings. How many different kinds of sandwiches could Oliver make with one, two or three fillings?Step One: Decide how you will show the information

| Bread <br> Thpe | 1 filling | 2 fillings | 3 fillings |
| :--- | :--- | :--- | :--- |
| white | ham | ham + cheese <br> ham + tomato | ham, cheese $\psi$ tomato |
|  | cheese | cheese $\psi$ tomato |  |
|  | tomato |  |  |
| brown | ham | ham + cheese <br> ham + tomato | ham, cheese $\psi$ tomato |
|  | cheese | cheese $\phi$ tomato |  |
|  | tomato |  |  |

Step Two: Work back through the problem.

| Bread <br> Type | 1 filling | 2 fillings | 3 fillings |
| :--- | :--- | :--- | :--- |
| white | 1 ham | 2 ham $\$$ cheese <br> 3 ham $\phi$ tomato | 4 ham, cheese $\phi$ tomato |
|  | 5 cheese | 6 cheese $\phi$ tomato |  |
|  | 7 tomato |  |  |
| brown | 8 ham | 9 ham $\psi$ cheese <br> 10 ham $\phi$ tomato | 12 nam, cheese $\phi$ tomato |
|  | 12 cheese | 13 cheese $\phi$ tomato |  |
|  | 14 tomato |  |  |

There are 14 possible sandwich combinations.

