Teddy Bear Outfits

In this problem solving activity the children are asked to work out different combinations of clothing for Teddy to wear.

In later years (Middle and Upper Primary) the children may use a strategy such as drawing a ‘tree diagram’ or filling in a table/chart as a way of solving the problem. However at this stage the children can solve the problem by colouring the different possible combinations.

It is very easy for children to accidentally repeat a combination and/or not find a combination. This will be particularly the case if randomly colouring items of clothing. A teacher/parent may choose to help by suggesting that the children follow a system or a plan. For example, first find all the combinations with one coloured hat, then move to all of the combinations with a second coloured hat . . . and so on.

In the second activity within this document, having found, for example, that there are 9 possible outfits with one coloured hat, some children may suggest/wonder if there will also be 9 outfits for each of the other two hats. A comment such as this is a sign that the child is looking for and noticing patterns. It would be worthwhile at this point to say something like “That’s a very good question. I wonder if you’re right. Let’s colour in some more outfits and find out.”
Teddy Bear Outfits

Teddy’s favourite colours are red, blue and yellow.

He has a red, blue and yellow hat.

He has a red, blue and yellow shirt.

He has red, blue and yellow pairs of shoes.

Teddy likes to wear three colours each day. Can you colour 6 different outfits for him to wear?
Teddy Bear Outfits

There are six different combinations

<table>
<thead>
<tr>
<th>Hat</th>
<th>Shirt</th>
<th>Shoes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Blue</td>
<td>Yellow</td>
</tr>
<tr>
<td>Red</td>
<td>Yellow</td>
<td>Blue</td>
</tr>
<tr>
<td>Blue</td>
<td>Red</td>
<td>Yellow</td>
</tr>
<tr>
<td>Blue</td>
<td>Yellow</td>
<td>Red</td>
</tr>
<tr>
<td>Yellow</td>
<td>Red</td>
<td>Blue</td>
</tr>
<tr>
<td>Yellow</td>
<td>Blue</td>
<td>Red</td>
</tr>
</tbody>
</table>
Teddy Bear Outfits

Teddy’s favourite colours are red, blue and yellow.

He has a red, blue and yellow hat.
He has a red, blue and yellow shirt.
He has red, blue and yellow pairs of shoes.

Teddy wants to see how many different outfits he can make.
He’s happy to be all in one colour, have two colours or three colours in his outfit.

Colour in all of the different outfits you can make for Teddy.

(You may not be able to colour all of the pictures below!)
Teddy Bear Outfits

There are 27 different outfits that can be made using a combination of one, two or three colours.

Hat  Shirt  Shoes
Red  Red  Red
Red  Red  Blue
Red  Red  Yellow
Red  Blue  Red
Red  Blue  Blue
Red  Blue  Yellow
Red  Yellow  Red
Red  Yellow  Blue
Red  Yellow  Yellow

Hat  Shirt  Shoes
Blue  Red  Red
Blue  Red  Blue
Blue  Red  Yellow
Blue  Blue  Red
Blue  Blue  Blue
Blue  Blue  Yellow
Blue  Yellow  Red
Blue  Yellow  Blue
Blue  Yellow  Yellow

Hat  Shirt  Shoes
Yellow  Red  Red
Yellow  Red  Blue
Yellow  Red  Yellow
Yellow  Blue  Red
Yellow  Blue  Blue
Yellow  Blue  Yellow
Yellow  Yellow  Red
Yellow  Yellow  Blue
Yellow  Yellow  Yellow