Attachment 3: **Ratio problems** (Ratios and Rates)
*Copy, cut and distribute one section at a time.*

### Mochaccino Mix

Millie and Maxwell are creating their own homemade ‘mochaccinos’ with scoops of mochaccino mix (MM) and scoops of milk (m).

- **Millie:** 2:6 (MM:m)
- **Maxwell:** 5:11 (MM:m)

Which cup has the stronger mochaccino flavor? How do you know?

### Your turn to make a mochaccino

You decide to make some mochaccinos using Millie’s recipe.
- If you use 18 scoops of milk, how many scoops of MM will you use?
- If you use 1 ½ scoops of MM, how many scoops of milk will you use?
- If Millie’s recipe makes a small drink for one person, what quantities will you use to make a small drink for eight people?

You decide to make your own mix.
- You use a 2:8 ratio in your first drink. What percentage is mochaccino mix?
- Your second drink mix is stronger. You use a 3:7 ratio. What percentage is milk?
- Your third drink mix is really thick. It is made with 40% mochaccino mix. What ratio did you use?

### Odds

It’s winter in the south. Four children are predicting the likelihood of school having to close early because of the snowfall that is predicted. They state their odds as **Yes** will close (Y) to **No**, won’t close (N).

<table>
<thead>
<tr>
<th>Odds</th>
<th>Y:N</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:5</td>
<td>7:9</td>
</tr>
<tr>
<td>5:11</td>
<td>6:10</td>
</tr>
</tbody>
</table>

Filipo  | Toni  | Arapeta | Mona |
-------|-------|---------|------|
3:5    | 7:9   | 5:11    | 6:10 |

1. If you wanted the odds of school closing to be greater, whose odds would you pick and why?
2. Whose odds show the greatest chance of school remaining open?