

<p>Balancing act</p>	<p>Skills practised:</p>
<p><i>Children balance multiple number shapes to find equivalent multiplications.</i></p>	<ul style="list-style-type: none"> • Counting in 2s, 5s and 10s. • Understanding multiplications as repeated addition
<p>Conjecture: <i>Different multiplications can have the same answers.</i></p>	
<p>What to do: <i>Children work in pairs.</i> <i>Each pair needs a bucket balance and lots of 2s, 5s and 10s number shapes (or sticks of 2s, 5s and 10s identical cubes).</i></p> <ol style="list-style-type: none"> 1. Ask children to put two 5s shapes in one bucket of the balance. They then place 2s shapes in the other bucket until the two buckets balance. Write the matching addition $5 + 5 = 2 + 2 + 2 + 2 + 2$. <p>CHALLENGE: Write the matching multiplication: $2 \times 5 = 5 \times 2$.</p> <ol style="list-style-type: none"> 2. Ask children to experiment putting different numbers of 5s shapes in one bucket and 2s shapes in the other bucket until they balance. They can put however many they like of each shape in each bucket, but one bucket must only have 2s and the other bucket must only have 5s. 3. Children record their results by drawing the shapes, writing the matching additions or multiplications. 4. Repeat, this time asking children to balance a 10s shape with 5s shapes, then 2s shapes. 5. Repeat, this time putting several 10s shapes in one bucket and trying to make it balance numbers of 2s shapes, and then 5s shapes. <p>How many different balancing multiplications can children find? Can children predict how many 5s shapes might balance a 10s shape? Two 10 shapes?</p> <p>CHALLENGE: Can children write the matching multiplications each time?</p>	
<p>Aims:</p> <ul style="list-style-type: none"> – To begin to understand commutativity – To begin to make and test predictions 	<p>Minimum number of calculations expected</p> <p>8</p>

