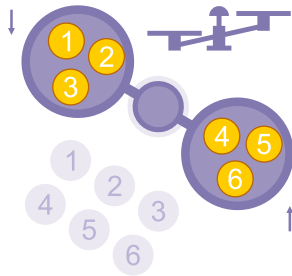
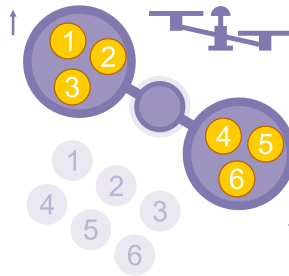


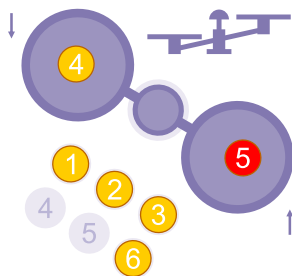
Suppose you have six identical looking coins. Five weigh 8 grams, while one weighs 7.9 grams. How can you identify the lighter coin in just two weighings using a balance scale?



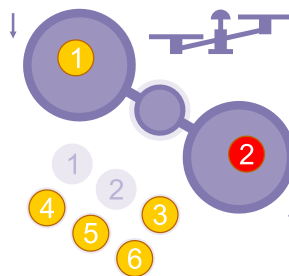
A1 Result of the weighing 1



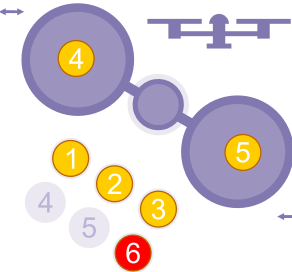
B1 Result of the weighing 1



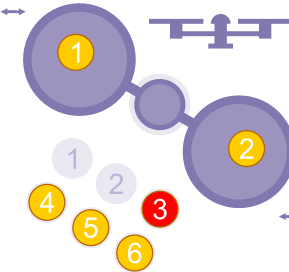
A2 Result of the weighing 2



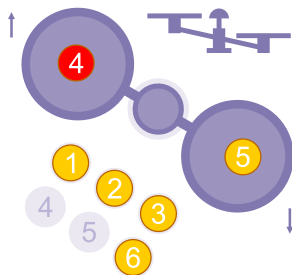
B2 Result of the weighing 2



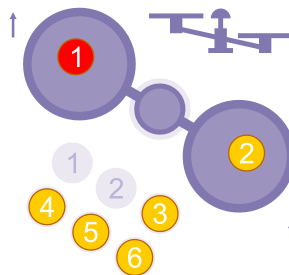
A3 Result of the weighing 2



B3 Result of the weighing 2



A4 Result of the weighing 2



B4 Result of the weighing 2

Put 3 coins on each side of the scale. The lighter stack has the lighter coin. Then weigh 2 of these 3 coins. If these two balance, the unweighed coin from among those 3 coins is the lighter one. Otherwise the lighter one is on the light side of the scale.