Grades 8 (S), 9-12 (S)
Duration: 15 min
Tools: one 9 pcs Set / pair
Individual / Pair work
Keywords: Probability, Favourable outcome, Total outcome

614 - Pick one Block


MATHS / PROBABILITY

## DESCRIPTION

Students consider the probability of the following events:

1. Picking the 123 piece from the 9 pcs Set as a random choice.
2. Picking the 222 piece from the 9 pcs Set as a random choice.
3. Picking the 123 or 222 piece from the 9 pcs Set as a random choice.

## SOLUTIONS/EXAMPLES

Start by finding the identical pieces.

1. The 9 pcs Set contains two 123 pieces, so the probability to pick a 123 piece from the set is $\frac{2}{9}=0 . \dot{2}=22 . \dot{2} \%$.
2. The 9 pcs Set contains one 222 piece, so the probability to pick the 222 piece from the set is $\frac{1}{9}=0 . \dot{1}=11.1 \%$.
3. The 9 pcs Set contains two 123 pieces and one 222 piece, so the probability to pick 123 or 222 is $\frac{2}{9}+\frac{1}{9}=\frac{3}{9}=\frac{1}{3}=0 . \dot{3}=33.3 \%$.

| How many | 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Pieces |  |  |  |  |  |  |  |

## PRIOR KNOWLEDGE:

The traditional model of probability
RECOMMENDATION/COMMENTS

