## Tree Diagrams

1. The probability that Neil wins a game of chance is 0.4 . He plays 2 games. Complete the tree diagram below.

## Game 1

Game 2 Probabilities


Find the probability that:
a. He wins both games
b. He wins only one game
2. Anna and Bill are set to fail their maths exam because they are not good attenders at school. On a particular day:
$\mathrm{P}($ Anna attends school $)=0.6$
$\mathrm{P}($ Bill attends school $)=0.7$
Complete the tree diagram below.


Find the probability that:
a. Neither is at school
b. At least one of them is at school
3. There are 6 red and 3 white discs in a bag. A disc is drawn, then replaced and another disc is drawn.

Disc $1 \quad$ Disc 2 Probabilities


Find the probability that:
a. Both discs are the same colour
b. At least one of the discs was red
4. Melanie is a sixth form student who has 2 classes with homework due on a Tuesday.
The probability that she has her Maths homework is $\frac{2}{5}$
The probability that she has her English homework is $\frac{7}{10}$
Draw a probability tree diagram in the space below.

Maths
English
Probabilities

Use your diagram to find, P (No homework) and P (only one piece of homework)

