



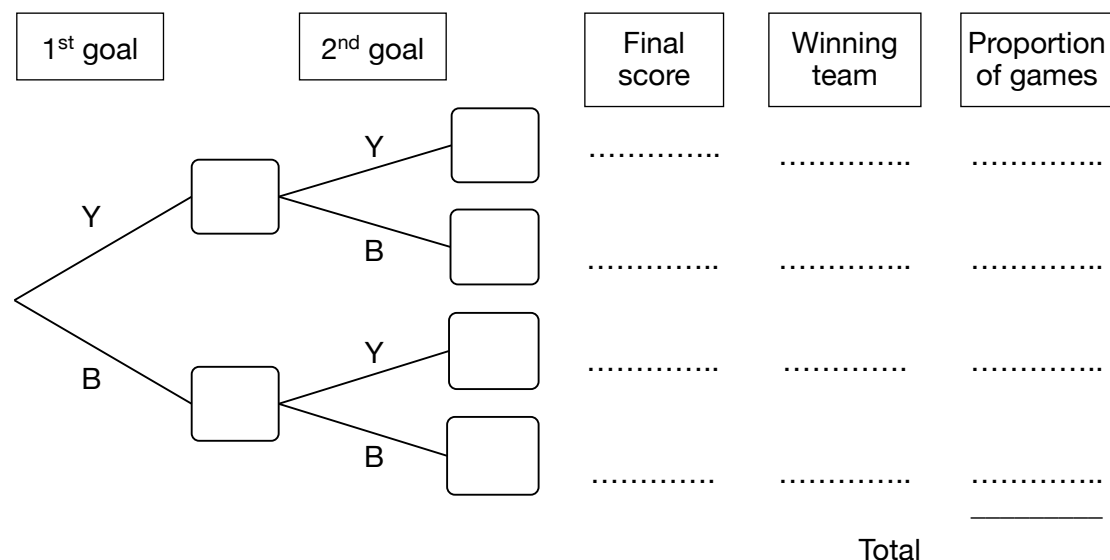
# Which team will win?

What do we **EXPECT** to happen in general in 2-goal football?

The game is modelled with a die which has four yellow sides (goals for Team Yeti) and two blue sides (goals for Team Beaver).

- Enter the proportion of times Y will score the first goal in the appropriate box.
- Enter the proportion of times B will score the first goal in the appropriate box.
- Then enter the proportions of times each team will score the second goal in the appropriate boxes - does it matter who scored the first goal?
- Complete the columns for the final score and the winning team.

## Tree Diagram



Compare this tree diagram with the tree for the expected results of 36 games.

1. In what proportion of the 36 games would you expect B to win? .....
2. Using the fractions in the boxes for BB, how could you get this answer? .....
3. In what proportion of the 36 games would you expect Y to win? .....
4. Does a similar calculation with the fractions in the boxes for YY, give this answer? .....
5. Calculate the proportions of games which should have the outcome YB .....
6. Calculate the proportions of games which should have the outcome BY .....
7. Are these answers the same as you found for 36 games?