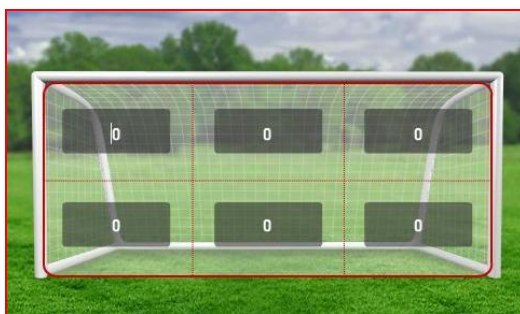




### Activity 3: Penalties – Interactive penalty taking tool



Enter your own settings for the probability of scoring a goal in each of the six zones of the goal.

Take a few penalty kicks.

- Switch between *View Your Settings* and *View Actual Scores*
- Do you see what you expected?
- Look at the results as a *Fraction*, as a *Percentage* and as a *Decimal*
- Record the settings you put in and the results you obtained in the grid below.

Take lots more penalties.

- Do *Your Settings* and *Actual Scores* match more closely now?  
Can you explain why this is?

Try different probabilities, for example:

- What happens if you set the probability for each zone to 25%?
- What if each zone is set with a different probability?
- What probability figures do you think would match a real penalty kick situation?  
Think back to the discussions you had when you looked at the penalty kick videos or the 3D penalty geometry activity.

|        |        |        |
|--------|--------|--------|
| Zone 1 | Zone 2 | Zone 3 |
| Zone 4 | Zone 5 | Zone 6 |

The '*data reset*' button clears the accumulated goals (Do you want to make a note of them first?) and lets you put in different figures.

'*Export to CSV*' exports the data to the clipboard, which you can then paste into a spreadsheet.