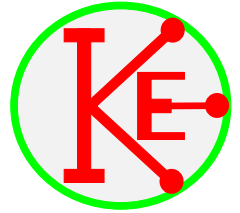


21 Balance1



EQUIPMENT

- See-saw template
- cardboard (cereal packet)
- cocktail stick
- 1p coins
- Glue
- Bradawl to help students push cocktail stick through their see-saw.

RISKS

Cuts from scissors

Paper cuts

Stab injuries from cocktail stick

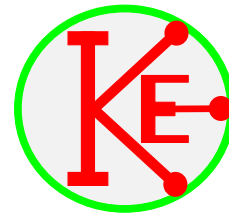
SESSION

- 1). Use demo see-saw to show the idea of a see-saw balancing.
Explain that an approximate balance is sufficient.
- 2). Students construct see-saw and adjust so that it balances.
Help students with fitting cocktail stick through their see-saw.
- 3). Explain to students that the 1p coins should be half way across the lines on the see-saw.
- 4). Students investigate when the see saw balances with different positions of 1p coins.
Students complete work sheet.
- 5). Students try to discover rules for balancing.
- 6). Possible extra work - use off set see saw by having cocktail stick away from the centre.

Construction details for see-saw at:-

<http://www.ikes.16mb.com/physproj/seesaw.pdf>

NAME:

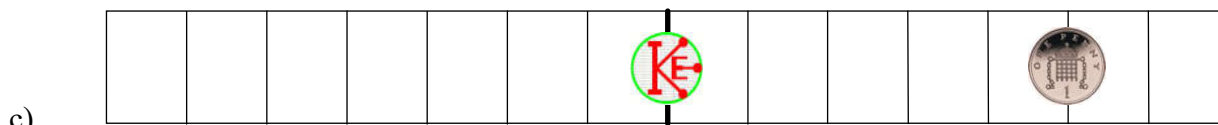
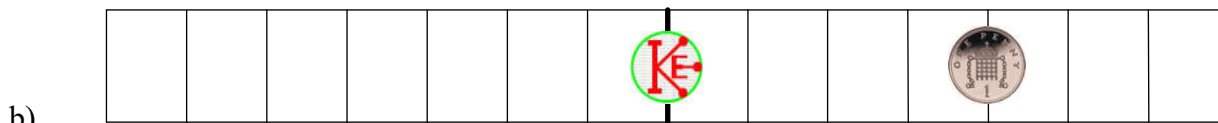
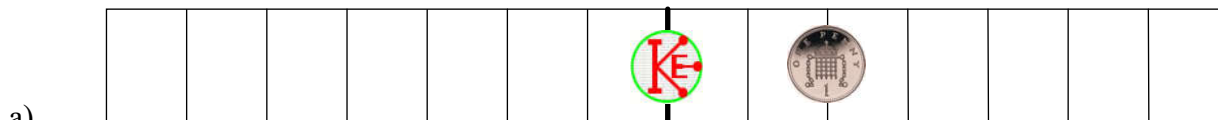


Investigations

What are the conditions for a see-saw to balance?

Take care when putting the 1p coins onto the see saw because it is quite delicate.
The end of a pencil may be helpful to gently push the coins into place.

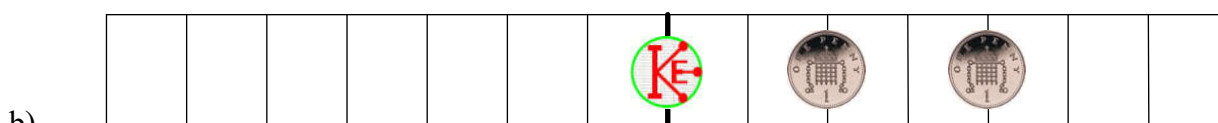
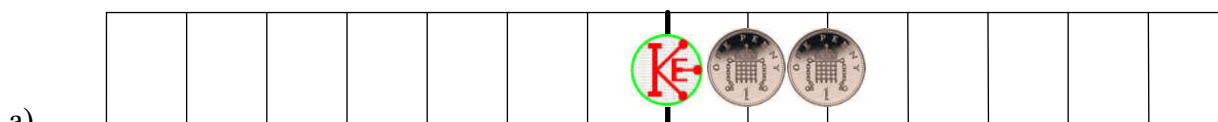
- 1). Use the see-saw to find where a 1p coin should be placed to balance the following:-



What is the general rule for this?

.....

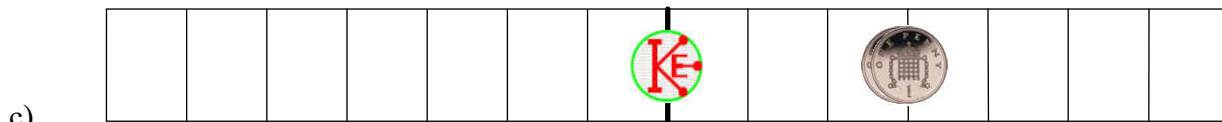
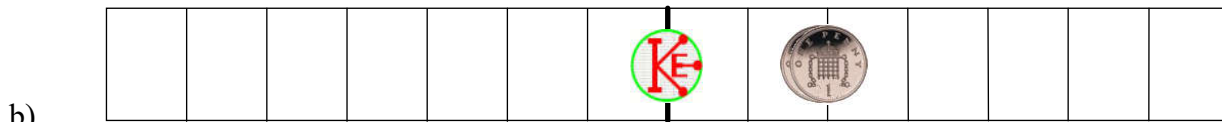
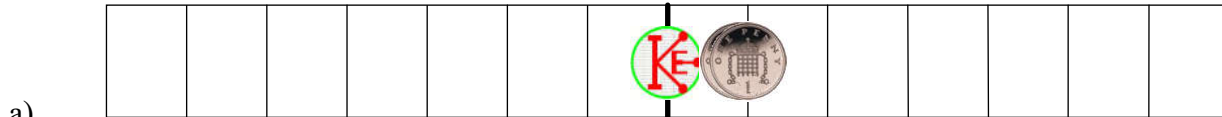
- 2). Use the see-saw to find where ONE 1p coin should be placed to balance the following:-



What is the general rule for this?

.....

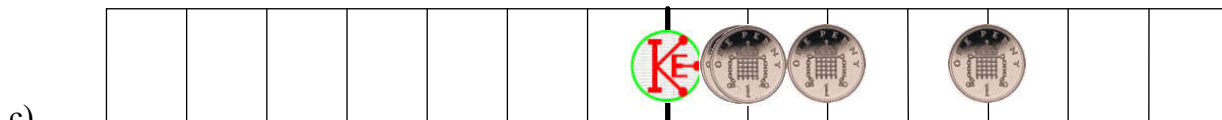
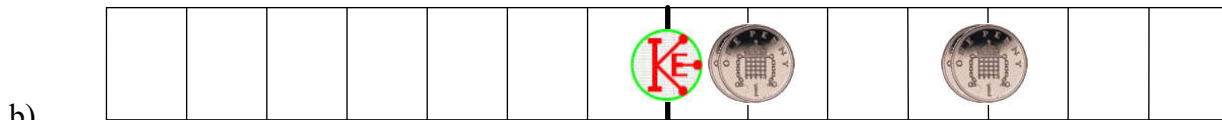
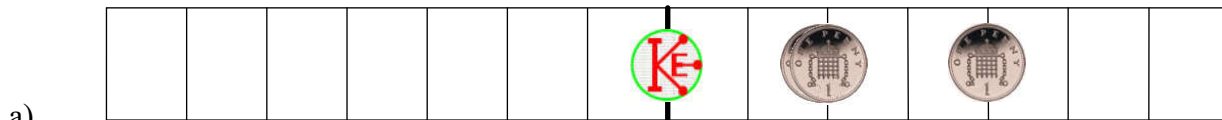
- 3). Use the see-saw to find where ONE 1p coin should be placed to balance the following:-



What is the general rule for this?

.....

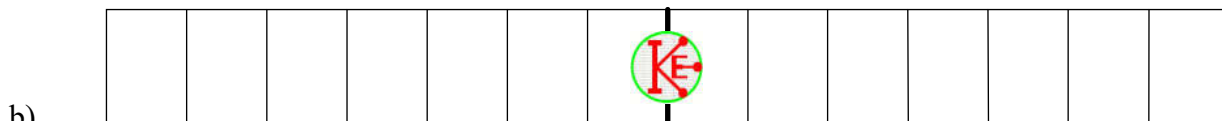
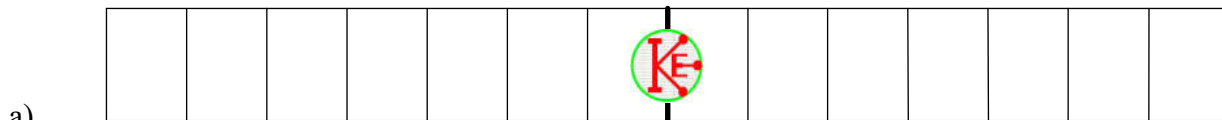
- 4). Use the see-saw to find where TWO 1p coin should be placed to balance the following:-



What is the general rule for this?

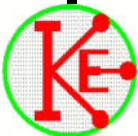
.....

- 5). Try a few of your own and show what balances on the pictures below.



See-Saw

Scale

												
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Support
