



Balancing act

Year

3

Focus

Adding two and three digit numbers together

What's needed

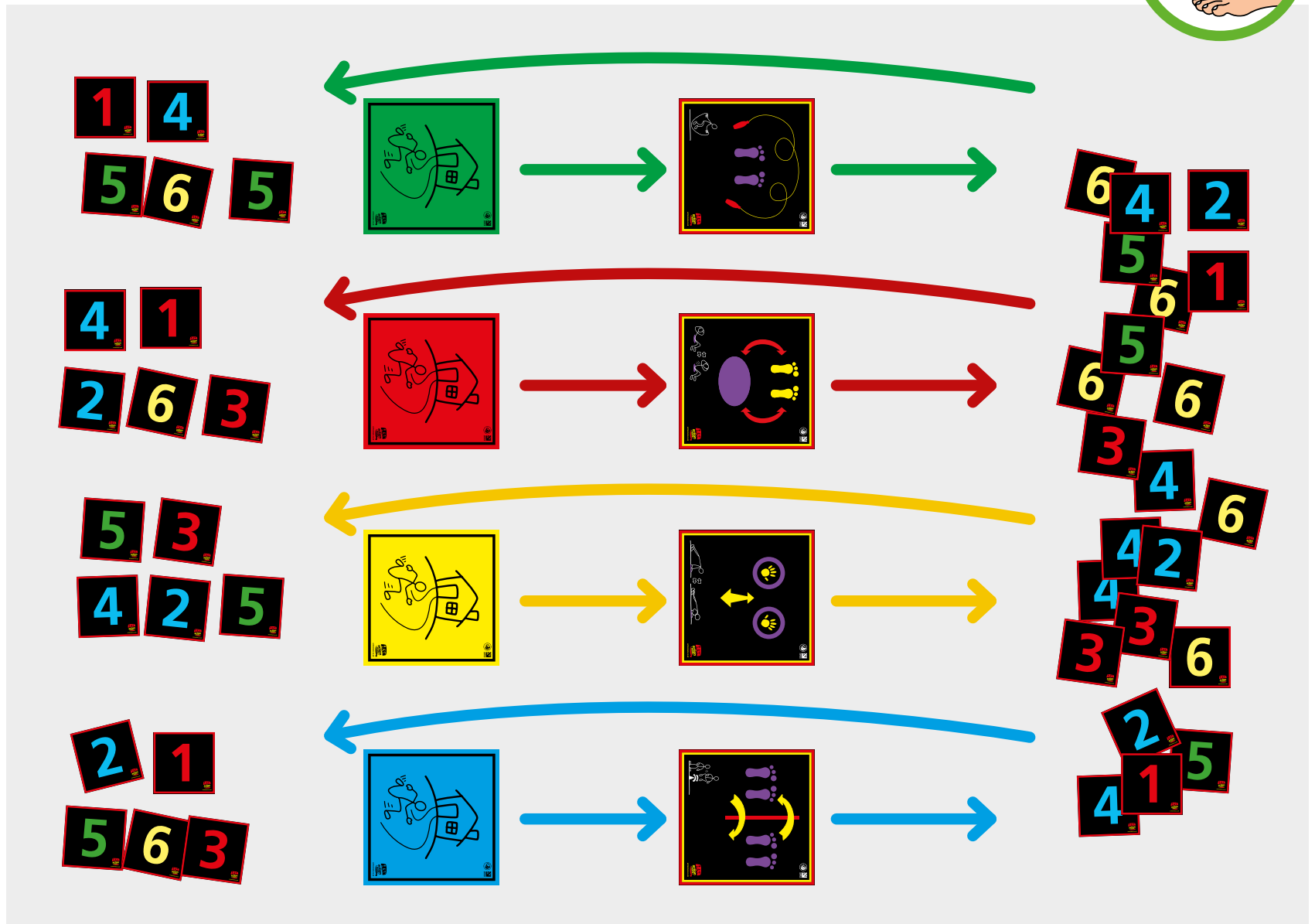
x4 Home Mats

Action Mats required:

Any four Action Mats

Maths mats required:

Single digit mats



The diagram illustrates four rows of a balancing act, each with a different color theme:

- Green Row:** Home Mat (green) → Action Mat (green) → Mats: 1, 4, 5, 6, 5. Action: A person balancing on a beam.
- Red Row:** Home Mat (red) → Action Mat (red) → Mats: 4, 1, 2, 6, 3. Action: A person balancing on a beam.
- Yellow Row:** Home Mat (yellow) → Action Mat (yellow) → Mats: 5, 3, 4, 2, 5. Action: A person balancing on a beam.
- Blue Row:** Home Mat (blue) → Action Mat (blue) → Mats: 2, 1, 5, 6, 3. Action: A person balancing on a beam.

On the right side of the diagram, there is a vertical stack of numbered mats for each row, representing the total weight or score:

- Green Row:** 6, 4, 2, 5, 6, 1
- Red Row:** 6, 6, 3, 4, 6
- Yellow Row:** 4, 2, 4, 3, 6
- Blue Row:** 2, 5, 4, 1



Warm Up

Adding actions

The teacher counts up in tens at a regular pace, students take a step around the room every time the teacher counts, when the teacher stops the students has to perform a balance of their choice. e.g. 10, 20...30, 40. Begin with multiples of ten, move on to numbers that are not multiples of ten. (13, 23, 33, 43, 53, 63.....73, 83,). Next move on to adding any two digit numbers together. When adding the ones count on while hopping in time to the counts, when adding tens add on by jumping in time to the counts. e.g. $42 + 23$ would need three hops for the ones column (43, 44, 45) and two jumps for the tens column (55, 65). Some students may find it beneficial to be able to see the numbers they are adding, use the maths mats to show the sum.

Main task

Balancing act

Teams of 5 stand behind their home mat and create a balance as a group.

The first student runs to their action mat, carries out 10 actions and then runs to the front and collects a single digit from the number mat while the other team members hold a balance on their balance mat. The first student then swaps with a team member who collects the second digit, they then swap with a third student and repeat until they have collected all five digits.

Students take their digits to their home mat and sit down. Task one is to make a 2-digit number. Have the groups share the number they have made. Task two is to make a three-digit number with the remaining three digits. Each group should read out the number they have made.



More able students should make the highest possible number they can, have them explain why that is the highest number they can make.

Each group now has a three-digit number and a two-digit number. Students need to use the hopping/jumping method in the warm up to count on in ones then tens to add them together.

Have the students rearrange the digits they have to make a new two-digit number and a new three-digit number. Repeat the process of adding them together



More able students should make the lowest possible numbers they can, have them explain why that is the lowest number they can make.