Suitable for 3-7 years

- Solo
- Pairs
- Groups

Circus activity

Structures and balancing

How to guide

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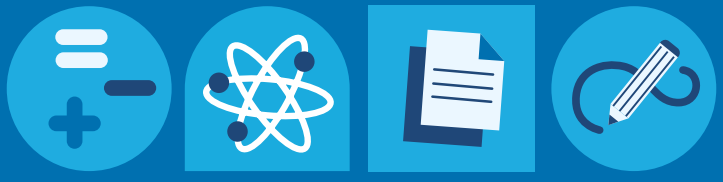
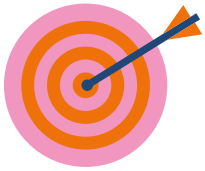
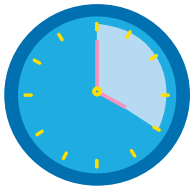


Circus activity
Structures and balancing



Aim

The aim of this activity is to use circus skills to explore what structures are strong and stable.



Timings

~15 minutes.

Materials and equipment

- Our instructional videos can be found here on You Tube. Here you will find step by step guides to what the children can do as well as some demos of advanced skills by circus professionals.

Instructions

1. Follow the list below to build up different structures and balances
2. Follow the guide to build structures similar to famous structures around the world

Structures and Balances:

1. "V - balance"

Counterbalance leaning away from each other

Concepts:

- Outwards-pulling forces;
- Equal and opposite forces; Counterbalance (equal forces); Counter tension (unequal forces);
- Symmetrical; asymmetrical
- Strength

Important safety tip

Always step carefully onto and off of your partner.

Never jump off of someone you are standing on – you can push a lot of force into their body with your legs and hurt them.**

How to perform the asymmetrical version of V-Balance

1. The "base" (the supporter) and the "flyer" (the one being supported) stand facing each other.
2. The base kneels on the floor.
3. The base turns the palms of their hands to face the ceiling. The flyer turns the palms of their hands to face the floor. The pair touch each other's palms, and then slide their hands forwards to hold onto each other's wrists. This is a very strong grip.
4. Keeping their bodies straight and strong, both partners lean their shoulders away from each other until their arms are straight.
5. Try to hold the balance for 5 secs.
6. To finish, the partners pull back in towards each other.

For Extra support perform the symmetrical version of the V-Balance

1. Stand up facing your partner.
2. Hold onto each other's wrists – one person with palms facing upwards, the other person with palms facing downwards.
3. Pull your tummy in gently to help keep your body strong.
4. Moving at the same time, lean your shoulders away from each other until your arms are straight.
5. To finish, pull yourselves back in towards each other.

Extra Challenge (to make balance more challenging)

A. Both partners stand on a bench to perform the V symmetrical balance.

B. The base sits on a gym bench and the partners perform the V asymmetrical balance.

C. With both balances, the partners can try letting go of one hand.

Variations

A. Performing a V-balance back to back.

B. Performing the V-balance sideways.

Questions

- Are you pulling or pushing your partner?
- Is your balance symmetrical (the same on both sides) or asymmetrical (different on each side)?
- What happens when you don't move back at the same time?
- How can you make your balance look better?
- How can you make your balance more challenging?
- This balance is the shape of the letter "V". Can you make a "V" shape in another way? What other shapes can you make while you are both leaning away from each other?
- Can you add in another person to the balance?

"A-balance"

Counterbalance leaning towards each other

Concepts:

- Inwards-pushing forces;
- Equal and opposite forces; Counterbalance (equal forces); Counter tension (unequal forces).
- Symmetrical; asymmetrical.
- Strength

Important safety tip

Always move slowly and carefully while supporting your partner.

If you move suddenly while your partner is leaning on you, you both might fall and hurt yourselves.*

How to perform A-Balance (symmetrical)

1. Stand facing your partner.
2. Put your hands up against your partner's hands like you are performing a clapping game.
3. Pull your tummy in gently to help keep your body strong.
4. Moving at the same time, take one or two steps back away from your partner until your arms are straight and you are pushing against your partner.
5. Try to hold the balance for 5 seconds.
6. To finish, walk back in towards each other.

Extra Support (to make balance more accessible)

- Perform the balance on your knees; or
- Perform the balance standing up and holding onto your partner's shoulders instead of pressing against their hands.

Extra Challenge (to make balance more challenging)

Perform A-Balance with **both arms straight above head** and palms touching.

This can be done kneeling or standing on the floor or on a bench.

Variations

A. A: Perform back to back, leaning against each other's shoulders. Can you sit down and stand up again in this position?

B. Perform with one person standing up, and one person with their hands on the floor and their legs in the air in a handstand position.

What other shapes can you make while you are both pushing against each other?

Questions

- Are you pulling or pushing your partner?
- Is your balance symmetrical (the same on both sides) or asymmetrical (different on each side)?
- What happens when you don't move back at the same time?
- How can you make your balance look better?
- How can you make your balance more challenging?
- This balance is the shape of the letter "A". Can you make an "A" shape in another way? What other shapes can you make while you are both leaning away from each other?
- Can you add in another person to the balance?

3-person box pyramid

Concepts:

- **Stacking;**
- **Centre of Gravity;**
- **Balance;**
- **Strength;**
- **Straight Lines**

Important safety tip

Always step carefully onto and off of your partner.

Never jump off of someone you are standing on – you can push a lot of force into their body with your legs and hurt them.

Do not put weight on a person's lower back or anywhere on their spine. Lean and kneel on their shoulders and hips only.

If you need someone to step off of you, say "**down**" in a loud voice so that they know they need to step off immediately.**

How to perform the Balance

1. Everyone practises a box base position. This is the 4-point kneeling position – kneeling on all 4s with shoulders above hands and hips above knees.
2. Two bases (supporters) kneel side by side. It helps if they are the same height.
3. The flyer (person being supported) puts their hands on the base's shoulders and kneels carefully up onto the base's hips.
4. Try to hold the Balance for 5 seconds.
5. The flyer climbs down carefully, watching where they are putting their feet to be careful to avoid stepping on the base's ankles.

Extra Support (to make balance more accessible)

Base in a box; Flyer sitting on base's hips facing away from base; or

Flyer sitting on base's hips, facing same way as base (like a horsey); or

Flyer crouching on top of base

Extra Challenge (to make balance more challenging)

1. Two bases kneel side by side in the box-base position.
2. Flyer makes a downward dog position on base's backs, facing forwards. The flyer's hands are on the base's shoulders and their feet are on the base's hips.

A flyer can stand up on the hips of two people in box base positions, **but must not jump off from this position.**

Variations

Children can work in groups with one, two or three children in the box base position to see how many ways they can take each other's weight.

****Remember, they must not stand on each other's spines or in the small of each other's backs.**

For example:

One child is in the box base position.

Flyer tries a few different positions, e.g.

a. Flyer lies across base's hips on their tummy;
b. Flyer sits on base's shoulders, avoiding the base's head.
c. Facing the floor, the Flyer puts their hands on the floor and puts legs across base's hips.

Questions

- When you were a base, where did you feel the weight pushing into you?
- When you were a Flyer, why was it so important to climb up onto your partner gently? How can you make your climbing up less sore for your partner?

Answer: Put your weight onto your partner gradually, not suddenly

- What would make this Balance less wobbly / stronger?
- What would make this Balance more wobbly?
- How could you add more people into this Balance?
- How could you add more people to the top of the Balance without it falling over?
  One possible answer: you could put an A or V Balance on the top of it.

Famous structures:

Eiffel Tower (triangles, towers, wide base and narrow top)

Amateurs – This group balance below demonstrates a wider, stable base and a narrower top, and is very stable. The two lowest bases can also be in the 4-point kneeling position (on all fours).

Professionals – Any tall balance with a wider base, e.g. standing on shoulders, standing on head, hand to hand, neck to neck

Colosseum (Circles, stacking, towers, inwards-pushing forces)

Amateurs – Larger children or adults stand in a circle with arms around shoulders, feet shoulder width apart. Smaller children can then try to push the circle to make it wobble, or climb around the outside.

Standing counter tension, to demonstrate inwards-pushing forces – in a pair standing on the ground, or in a four standing on seated bases. Pairs can hold onto their own elbow and their partner's shoulder for more stability.

Professionals – Circular tower using a Standing upright or Thigh-stand base; any balance where the acrobats are pushing against each other. Also see Pyramid stacking balance below.

Tower bridge (symmetry, counterbalance, outwards-pulling forces, levers)

Amateurs – Counterbalances below.

Professionals – Scorpion counterbalance.

Also, possible: Chest stand on box base – this is not a difficult balance and can be performed in an able-bodied children's workshop, with two pairs of acrobats. The flyers would be facing each other and could raise and lower one leg to create the effect of the bridge raising and lowering.

Taj Mahal (pillars, domes, decorative flourishes, balances that look top-heavy but aren't)

Amateurs – assisted handstand by the wall – walking your feet up the wall, keeping one foot on the wall for balance and stretching up the other leg as tall as you can?

Professional – Balances that look top heavy but aren't?, e.g. pike balance on feet, shoulder stand on feet, hand to hand with flyer in straddle or frog; high kneeling on hands; hand to hand with flyer in backbend; high throne sit; contra-sit on shoulders; along with any tall balances to represent pillars

Prompt questions

Why is this structure stable?

What shapes can you see in the balances/structures?
Is that linked with how stable the structure it is?

Extension ideas

This circus activity links with our matching pairs Structures card game by Fionah.

Why not try using materials (e.g. card, paper, blocks etc) to build a structure of your own design?

Also if you enjoyed learning through circus skills try our other activities like Spinning Plates and Wind Turbines, Juggling and Computer Vision or Hula hooping with Rocket Launching or Satellite Orbits