

Museums
& Galleries
Edinburgh

Museum
of Childhood

MOVING TOYS

Early and First level



The museum introduces three key themes of childhood; life, learn and play

In this gallery you will find objects and information relating to these themes. This trail focuses on *moving* toys.

Can you find the moving toys shown?

The dog and the phone.

What are these toys?

Little Snoopy and Chatter Telephone.

How do they move/ how would you play with them?

Pull along, using the string.

What are they made from?

Wood, plastic, string, metal.

Are they old or new toys?

Old - Little Snoopy 1980 and Chatter Telephone 1962.

Do you have similar toys at home?

Muffin Junior Puppet is another moving toy in this gallery

What is this toy?

How does this move?

How would you play with it?

What is it made from?

Is this toy old or new?

Do you have similar toys at home?

Have you ever played with a puppet before?

THERE ARE SOME FUN INTERACTIVE AREAS IN THIS GALLERY THAT YOU MIGHT LIKE TO EXPLORE – AN IMAGINATIVE AREA, INCLUDING A STORY TELLING TENT AND PROBLEM - SOLVING AREA. THERE IS ALSO A VIDEO YOU MAY LIKE TO WATCH.





In this gallery you will find a large range of moving toys

There are optical and musical toys, marionettes, cars, trains, animals, farms, zoo and circus, doll houses and many more.

Please look for: the toy cars and the mechanical wind up circus toys.

Can you find the moving toys shown?

The mechanical circus toys and the toy vehicles.

Mechanical wind up circus toys

What are these toys?

Seesaw, ferris wheel, seal, elephant, somersaulting clown.

How do they move/how would you play with them?

Use the key to wind them up - there is a more detailed explanation below.

What are they made from?

Metal.

Are they old or new toys?

Old, Clockwork clown in barrel approx. 1870, see saw clowns 1930, somersaulting clown 1950, ferris wheel / fun fair 1950.

Do you have similar toys at home?

Toy vehicles (cars, buses, fire engines)

What are these toys?

Cars, fire engines etc.

How do they move / how would you play with them?

Push / pull.

What are they made from?

Metal.

Are they old or new toys?

Old.

What colour cars can you see?

Mechanical (clockwork) toys - how they work?

A clockwork device is mechanical and has these key components:

- A key you wind to add energy.
- A spiral spring to store this energy.
- A set of gears (these release the energy and control the speed and force).
- A mechanism the gears drive which make the toy work.

If you look at the ferris wheel you can see the gears and how they would make the wheel move.



Can you make a noise like an elephant or a seal?

Can you move like an elephant?

In pairs: perform a clockwork sequence! One child winds up another, causing the other child to move.

Some ideas for action: from crouching to standing / arms moving out and up / or walking.



ZOETROPE (GALLERY 2)

Zeotropes and musical toys

Use the **Zeotrope** on display to have a look at how they work.



What do you think these are?

Zoetrope, pronounced zoh-uh-troh-pe.

How do they move/how would you play with them?

By looking through the slits and spinning the cylinder - you watch the animation.

What are they made from?

Metal / wood.

Are they old or new toys?

Old.

- These are a bit like an old version of cartoons that you watch on tv now. Or like a flip-book if you have ever made one of those.

Mechanical (clockwork) toys - how they work?

- Next to the optical toys are the musical toys and the marionettes (puppets). *The Wooden Rattle* (number 18) is one that some children may recognise - they are popular football ralles (or clackers).
- The *marionettes* are next to the musical toy case. These puppets have control bars. This is different to the Muffin puppet in gallery 1.



DON'T FORGET TO CHECK OUT OUR 'HANDY HINTS' BOOKLET
which has links on how to make your own zoetrope, flipbooks, thaumotropes and other fun things to try.



This gallery is full of dolls, teddy bears and automata

The automata in this gallery range in date from 1870s - 1900s. Automata toys use a clockwork mechanism.

Please look for: The 'bunny in the lettuce' automata toy (and the dolls).

What is this?

A bunny inside a lettuce.

How do you think this toy move?

The bunny slowly pops up, waggles his ears and then pops in again.

What makes it move?

Clockwork mechanism / wind up toy.

Do you think this toy is an old toy?
Why? Or why not?

Do you have any toys like this at home?
Eg: Jack-in-the-Box?

Can you 'boing' like a Jack in a Box or a bunny
in a lettuce?

Can you waggle your 'ears'?



Optional extra:

Try out this rhyme with the actions.

I SAW A LITTLE BUNNY GO HOP, HOP, HOP

I saw a little rabbit go hop, hop, hop!
I saw his little ears go flop, flop, flop.
I saw his little eyes go blink, blink, blink.
I saw his little nose go twink, twink, twink.
I said 'Mr Rabbit why don't you stay?'
But he looked at me and hopped away.

ACTIONS:

Hop three times on the words hop, hop, hop.
Put hands on top of head to imitate ears and flop them back and forth.
Point to eyes and blink three times.
Point to nose and scrunch it up and down.
Pretend to ask question.
Look left and right. Then hop away.



The Shoe Doll and the Queen Anne Doll

They provide a fantastic comparison of types of toys children would have played with (rich vs poor).

What kind of children would have played with these dolls?

Why do you think that?

Do you like the Shoe Doll?

Do you like the Queen Anne Doll?

Which is your favourite and why?

What do they have in common?

Both have dresses and hats, arms and legs, both loved.

Thinking about dolls - are they moving toys?

You can make them move when you play with them - many dolls have moveable arms and legs and sometimes head.

Can you find any toys in this gallery that move in different ways?

Are there any dolls made from surprising materials?

Bone, shoe, corn.

What could you make dolls out of?



Optional extra:

Sing with actions.

MISS POLLY HAD A DOLLY WHO WAS SICK

*Miss Polly had a dolly who was sick, sick, sick
So she called for the doctor to come quick, quick, quick.
The doctor came with his bag and his hat
And he knocked on the door with a rat-a-tat-tat.
He looked at the dolly and he shook his head
And he said "Miss Polly, put her straight to bed!"
He wrote on a paper for some pills, pills, pills
"I'll be back in the morning with my bill, bill, bill."*

ACTIONS:

*Rock a pretend baby in your arms.
Hold a finger phone to your ear. Tap your imaginary watch.
Act out putting on your hat and grabbing your bag.
Act out knocking.
Shake heads.
Pointy figure telling Miss Polly!
Act writing out the prescription for the medicine onto your hand.
Wave goodbye.*

Shoe Doll vs. Queen Anne Doll

| | |
|------------------|------------------------------|
| Poor | Rich |
| Homemade | Made with no expense spared |
| Hardy | Fragile |
| Cotton | Silk |
| Unusual / Unique | Lots of similar / same dolls |



This gallery shows a range of objects highlighting hobbies, collecting, arts and crafts, books, indoor and outdoor games

There are several moving toys in this gallery. Please look for the: diabolos, cup and balls, yo yos and spinning tops. Spinning tops use *gyroscopic* motion. Yo-yos use *friction, angular momentum and gravity*.

Can you find the diabolo, yo-yos, cup and ball and spinning tops?

Are there any toys in this case that you have seen before or have a home?

Which ones do you recognise?

Children may recognise diabolos, spinning tops and yo yos.

How do they move/ how would you play with them?

Do you think they would be easy or tricky to play with?

What are they made from?

Wood, plastic, string, metal.

Are they old or new toys?

Old - many of these toys were popular in the Victorian era.

Optional Extra:

- Dominoes and marbles are popular games to play.
- You can use dominoes effectively to show the '**domino effect**' - illustrating chain reaction/ cause and effect. With the dominoes standing on end, the fall of the first one (caused by gravity and turning into kinetic energy), each domino will fall.

A great practical experiment to try in class
(please see 'handy hints for more ideas).



WHILST YOU ARE HERE DON'T FORGET TO CHECK OUT PETER RABBIT TOY AND BOOK(S).
A CLASSIC TOY AND SERIES OF BOOKS FROM CHILDHOOD.



Gird and Cleek and skipping rope

Gird and Cleek (hoop and stick)

- This was a very popular toy, often made in the local blacksmiths. The one on display is from circa 1925.
- Children would run along using the stick to keep the hoop rolling, or to stop the hoop.

Skipping rope.

(In the case with the gird and cleek)

- Skipping with a rope uses: **energy** (supplied from the person skipping).
- As the rope goes up, **gravity** works against you. When the rope goes down **gravity** helps.
- **Friction** is a slowing force - this works against **motion**. When skipping friction between the rope and your hands, and between the rope and the air all works against **motion**.

In the corner of the room There are some displays, one highlighting 'girl' hobbies and another highlighting some 'boy' hobbies.

Girl hobbies:

Sewing, and cross stitch with samplers and sewing machines.

Boy hobbies:

Wood working tools, boats and planes.

Why do you think that boys and girls had different hobbies?

Was it fair that boys weren't allowed to do the same things as girls and vice versa?

Do boys and girls have different hobbies now?

Do you have a hobby?

What is it?





This gallery is set out like a street scene from the past

Within each display there are many moving toys. You will see some that you have already seen in other galleries - such as the diablo, skipping rope and, gird and cleek. See if the children can remember them.

- This toy is called a **velocipede**. Initially of French design. This one was made in Birmingham.
- The motion of the velocipede is a trotting one.

Can you find the velocipede?

What is this?

A horse that looks like a bike.

How does this move?

Pushing on the foot pedal causes a trotting motion.

What is it made from?

Metal, wood, leather, hair.

Have you ever seen a toy like this before?

Like a tricycle or a rocking horse.

Is the velocipede a new or old toy?

Old - this one was made in England in 1876.

Do you think that this would be an easy and fun toy to play with?

Would you like a horse like this?

Can you neigh like a horse or make a trotting sound like a horse?

Can you find the pull along horses?

And the rocking horse?

Can you describe these toys?

Pull along horses, smaller than velocipede, rocking horse is bigger.

What are they made from?

Mostly wood.

How would you play with them?

Pull them along, sit on the rocking horse and rock, moving forwards and backwards.

Which do you prefer?

Which would you most like to play with?



Optional Extra:

*Horse, Horse
Horse, Horse don't you stop,
Just let your hooves go clippety-clop,
Your tail goes swish and the wheels go
round,
Giddy-up! We're homeward bound!*