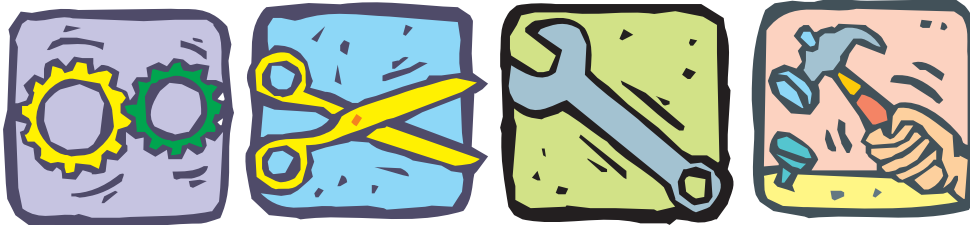


Early Childhood Education Newsletter

Issue 5 October 2009

Theme: Simple Machines and Investigating

Investigating is what small children do best. They love to explore their world and poke and prod to see what happens. To encourage this important science skill provide the children with activities in which they can change one component to explore what happens. Try setting up a ramp which a car can slide down (a poster tube works well here to stop the car going off the track). Encourage the children to let the car roll down the ramp and along the floor until it stops, place a marker at this point. Allow the children to change the height of the track and try again. Does changing the height of the ramp change how far the car goes? Encourage the children to reach their own conclusion. Set up a lever, using a ruler and a block as a pivot, and see how much can be lifted if they change where the pivot is placed.



In 2010 we will only be posting our newsletter to schools who have visited us in the past two years and those who have signed up to receive newsletters. The newsletter will still be available on our website. www.sciencealive.co.nz

You may also sign up to receive news and updates via email. Send your contact details to community@sciencealive.co.nz.

Simple Machine Links

Literature:

Diggers (Blast off! Readers: Mighty Machines) by Derek Zobel

Cranes (Mighty Machines) by Amanda Doering Tourville and Zachary Trovery

Make It Move by Jennifer VanVoorst

How Machines Help by John Sheridan

Internet Sites:

There is a surprising lack of Simple Machine activities suitable for preschool aged children available on the internet. If you know of any good sources please let us know and we can pass this information on to others. Until then, your best option is to come to Science Alive! for some hands-on interaction with gears, levers, wheels and pulleys!

Early Childhood Education Programme Schedule 2009

Machine Madness

19 October - 18 December

2010

Animals Around Us

1 Feb - 31 March

Out Of This World

19 April - 18th June

What's the Forecast?

21 June- 2 July

19 July - 21st August

Inside Me

13 August - 29 October

For more details, please refer to our 2010 ECE brochure or phone (03) 365 5199.

Sound and Mirrors

The Interactive area at Science Alive! currently has the theme of sound and mirrors. There will be many hands-on exhibits suitable for all ages such as the slap-o-phone, electric harp and distorting mirrors.

Resources for Hire

A pulley kit is available for hire as well as many other science kits and resource cases.

Please contact Gail on (03) 3655199 or check the website www.sciencealive.co.nz for more information

Bringing Science To Your Classroom

Make a Very Simple Moving Car

You will need:

- Milk bottle lids or larger (put a hole in the centre beforehand by drilling or poking with a hot metal skewer).
- Polystyrene OR pieces of an old 'For Sale' sign (coreflute) -cut into the size of a pack of playing cards).
- Paper Clips (cut in half to give two loops)
- Pliers with wire cutters for cutting paperclips and skewers.
- Wooden skewers
- Bluetak

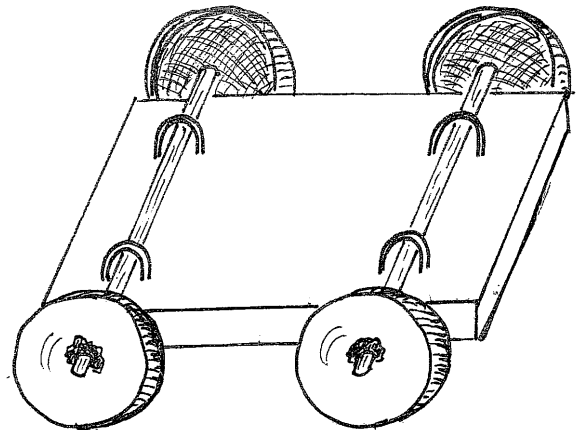
Instructions

- Press four paper clip loops into the top of the polystyrene blocks, two on each side front and rear. These will hold the axles for the wheels.
- Thread wooden skewers through the loops and cut to the correct length.
- Put the wheels onto the skewers and hold in place with the blue tack.

The car body should hang from the wheels without touching the floor, this way the wheels will turn easily.

The children can decorate the cars (just don't use a hot glue gun on the polystyrene!).

You could also try using something else to be the wheels, such as can lids or CD's.



Go on a treasure hunt at your preschool to find items that have levers, pulleys, gears or wheels.

Levers

- Scissors
- Door handles
- Seesaw
- Hammer
- Screwdriver
- Hole punch
- Knife/fork/spoon
- Stapler
- Clothes pegs

Pulleys

- Fishing rod
- Curtains/Blinds
- Seat belts
- Flying fox
- Crane
- Flag pole
- Laundry line

Gears

- Bicycle gears
- Inside a clock
- Can opener
- Egg beater
- Wind-up toys
- Wind up clock

Wheels

- Rollers
- Office chairs
- Ball bearings
- Toys