Reels

Activity Plans February 2020



S.T.E.A.M-tastic

Science

<u>Title:</u> Strength and movement

Aim: Explore the displacement of rolling objects, dropped on a ramp (covered with different materials) and observe the influence of the nature of covering materials in its displacement

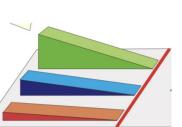
Materials: Wood or paperboard for ramps, Cork, plastic, polystyrene, paper, rubber, aluminum, ...

Activity:

Introduction: In many of the children's games there are forces that produce movement. It happens when they make towers, when they set up ramps for cars to move faster, when they put rope toys in motion, or when they realize that is easier when they ride a bicycle down the street than going up. Outdoor equipment is also an example of movement and force.

This activity will be explored, in implicitly, content related to the displacement of rolling objects (cotton reels) on ramps (influence of slope and friction)

How to do it: Make ramps with approximately 1m in length and height from 5 to 10 cm. The ramp is only intended to set the object in motion on the horizontal surface, with the same instantaneous initial force. Test each of the covered materials, dropping the cotton reels from the top of the ramp. Register the place of arrival in each case, using a flag or a highlighter. Measure the distance of each cotton reel, using different colored threads and register it. Additionally, we can also make an experience using ramps with the same length but different heights (20, 30, 40 cm) and use again cotton reels



Technology

Activity Title: Learning about symmetry of shapes

<u>Aim:</u> Making a Robot with blocks that moves from Point A to Point B while using coding vocabulary such as forward, backwards, left and right.

<u>Resources/Materials needed:</u> bottle caps ● cork caps ● vinyl glue

Activity:

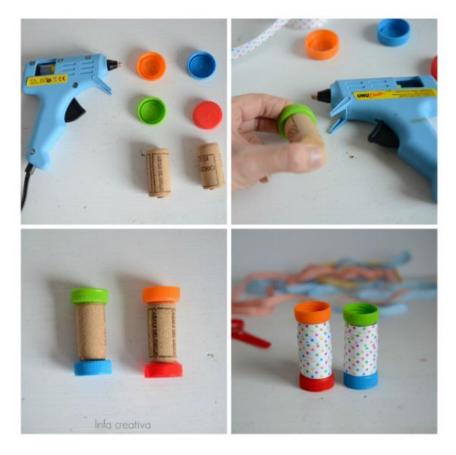
Step 1. Collect different bottle and cork caps

Step 2. Find matching bottle and cork caps:

Step 3. Stick 2 bottle caps on the cork: on the 2 ends

Step 4. Be careful bottle caps need to be bigger than corks

Step 5. Decore the cork with paper or drawings



Engineering

Activity Title Cotton reel cars

by Voudouri Georgia Greece

Aim: Explain actions, problem solving, fine motor skills

Resources/Materials needed: Cotton Reel, Match Stick or similar, Elastic Band, Pencil

Activity:

Teaching-Learning activity:. Cut a small piece of the candle, and then make a small hole in the middle so that it forms a washer-type ring. Thread the elastic band through the center of cotton reel. Place a small match stick or similar in one end loop. Place a pencil through the other end loop, Wind the pencil tightening the elastic band and let go.

Links/photos/recourses:

https://www.instructables.com/id/Cotton-reel-tanks/

https://rainydaymum.co.uk/cotton-reelcar/#sthash.vvkdXwwG.dpbs& a5y p=3745251

https://www.youtube.com/watch?v=yzNwSYE03y0



<u>Arts</u>

Activity Title: Reel Press

Aim: Promote creativity using cotton reels and develop motor fine skills .

Resources/Materials needed: Colors, cotton reels(different sizes), A4 papers

Activity

Introdution: What is cotton reel printing? Discussion on this issue with children. This is an art event, different printing techniques can be discovered. (Leaf, brush, finger ect.)

These are the links:

How to made?

Additional information is available:

https://picklebums.com/ten-crazy-things-to-print-with/

Similar activities

https://tr.pinterest.com/handsonaswegrow/simple-diy-painting-for-kids/

https://www.youtube.com/watch?v=xSsdnC896pU&ab_channel=5-MinuteCraftsPLAY

https://www.youtube.com/watch?v=SJq9XfbPXwE&ab_channel=HurstCreations



Maths

aActivity title: Threading Reel Art

<u>Aim:</u> To Window Art for sound, colour and creativity while enhancing fine motor skills and hand and eye co-ordination while enhancing sequencing and colour recognition

Resources/materials needed: reels, thread/string, and stick

Activity

<u>Step 1</u>: Introduction: Give children loose part materials to play with. Ask to sort out the reels in one section and put them in a container easy for you to find.

Step 2: Give a student a thread/string each and tight end one reel.

Step 3: Let students thread with the reels in place.

<u>Step 4:</u> close the end of the threaded string and tie it on a vertical stick.

Place each thread one next to the other making a curtain effect.

<u>Step 5:</u> Hang the threaded reel curtain by a door or window for chimes, colour and sight.

Extra: You can give students a sequence to thread eg: red, blue, green reels etc. or you can keep it freeplay and allow creativity to

