

VIRTUAL CHILDCARE PARENT SUPPORT SERVICES

VOLUME #104
ACTIVITIES THAT
PROMOTE STEAM
LEARNING



STEAM ensures that your child's knowledge base is well rounded. The inclusion of Arts along with Science, Technology, Engineering, and Mathematics (STEAM) will help children to see potential problems and obstacles from many angles and come up with creative ways to solve them. STEAM-based learning gives children tools and methods to explore new and creative ways of displaying data, innovating, and linking multiple fields. It teaches them how to think outside the box! In this newsletter, we will provide different activities to promote STEAM and develop thinking.

ACTIVITIES INFANTS (3 -18 MONTHS)

YOGURT DIG

MATERIALS:

- Plain yogurt
- Chopped fruits

DIRECTIONS:

- Add chopped fruits to yogurt.
- Let your child explore the yogurt by digging in, tasting, and smelling it.

Click here to listen to "Let's Do the Robot!" song.

TODDLERS (19 MONTHS - 2.5 YEARS)

PRESSURE EXPERIMENT

MATERIALS:

- 2 sponges
- Straw
- Ziploc bag
- Pom-poms, toy cars or cotton balls
- Tape

DIRECTIONS:

- Place the two sponges, one on top of the other, inside the Ziploc bag.
- Place the straw between the two sponges so that one end of the straw is inside the bag and the other end is outside the bag.
- Seal the bag and secure it with tape.
- Blow into the straw to inflate the bag.
- Place pom-poms or cotton balls on a flat surface and place the bag behind them. Press down hard on the sponges and watch the pom-poms or cotton balls roll away!

Click here for more activities.

PRESCHOOLERS (2.5 - 5 YEARS)

RAINBOW SCIENCE EXPERIMENT

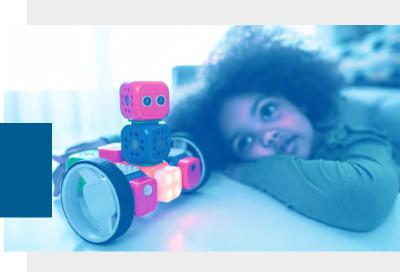
MATERIALS:

- Water based markers
- Paper towel
- String, ribbon or tape
- Paper clip
- Pencil
- Water
- Scissors
- Tray, dish or pan that can hold water

DIRECTIONS:

- Trace a rainbow on a paper towel.
- Cut the rainbow shape out.
- Using water based markers let your child draw the colours of the rainbow on the bottom of each side of the paper towel.
- Flip the paper towel over and let your child colour each end of the rainbow on the other side.
- Connect a string to a paperclip, clip the paperclip to the middle of the rainbow and hang or tape the string so just the bottom of the paper towel rainbow touches the tray or pan.
- Add water to the dish or tray, dip only the bottom of the paper towel in the water, and observe what happens.
- Ask your child questions about what they see. For example, "What happened to the colours?"
- Explain how the colours are "climbing up the rainbow".

Click here for more activities.



JK/SK (4 - 6 YEARS)

SHADOW SHOW

MATERIALS:

- Paper towel tube
- Clear plastic container or clear plastic bag
- Flastic
- Markers
- Flashlight
- Scissors

DIRECTIONS:

- Draw a circle on the container by tracing the end of the paper towel tube and cut it out. If you are using a plastic bag, secure your plastic bag on one end of the paper towel tube using an elastic.
- Write or draw shapes in the center of the circle.
- If you are using a plastic container, cut a small slit in the paper towel tube and insert the plastic circle in one end.
- Turn off the lights and shine a flashlight at the open end of the tube.
- Point your tube toward the wall or ceiling and enjoy the show.

Click here for more activities.

SCHOOL-AGERS (6 - 12 YEARS)

CODE YOUR NAME IN JEWELRY

<u>Click here</u> to learn about binary code

MATERIALS:

- Beads with different colours
- Thread or elastic jewelry cord
- Pen
- Paper

DIRECTIONS:

- <u>Click here</u> to see what each letter represents in binary code.
- After looking at the picture use the pen and paper to write your name in binary code.
- Choose colours to represent each letter in binary.
- Make your necklace or bracelet.
- Place a third coloured bead as a separator between each letter.

<u>Click here</u> to learn how to change the colours of a flower.



Immigration, Refugees and Citizenship Canada

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A TIP FOR TODAY

- Let your child lead and see what they discover on their own.
- Ask "What" questions when exploring. For example: "What are those insects doing?", "What shape is that stone?", "What is on the tree branch?", "What is under that rock?", "What do you see in the clouds?"
- Encourage your child to take risks.
- Follow your child's imagination there is no right or wrong way!
- <u>Click here</u> for more tips.