

STEM Concept(s): Force & Motion, Structure & Properties of Materials, Change

Help your child recognize that things move at the nano level. Begin with your child picking out 2 cups, then pouring water into the cups, and picking two food colorings to drip into the cups. Place a paper towel coming out of one cup and going across into the next cup. Wait and watch as the water 'walks' across the paper towel from one cup to the other. Talk about how the paper towels 'soak up' the colored water and **move** it to the next cup.

STEM IDEAS/WORDS

- Move
- Water
- Colors

MATERIALS

- Clear cups/Containers
- Paper towels/Coffee filters
- Food coloring

OPEN-ENDED QUESTIONS

- What do you think will happen if we add more water to the cups?
- What if we used paper instead of the paper towel?
- What do you think will happen if we moved the cups further apart? Raised one higher?

ENVIRONMENT

- If possible, limit background noise & distractions
- · Put materials within reach
- · Ensure the room is well-lit so the child can see the color change
- Lay down paper towels or newspapers in case there are spills
- Have gloves for your child if they don't like when their skin changes color from the food coloring
- Use a placemat with spots for each cup you will be using to support spacing of the cups

MATERIALS

- Have child's assistive technology ready and available, including augmentative & alternative communication (AAC) device
- Use an anti-slip mat under the cups
- Use cups with handles for easier gripping
- Use less water in a measuring cup or small pitcher so that the child can pour it easily

INSTRUCTION

- Use a variety of methods of communication (e.g., sign language, gestures) to meaningfully engage children
- Model folding one paper towel, pouring water, and/or dripping food coloring into cups
- · Start with just two cups and then add more if your child is interested
- Use visual cues to signal next steps (see next page)



Follow your child's lead and interests. Enthusiastically ask your child questions about what they are doing and what they like.



Answer your child's questions. If you do not know the answer, work together with your child to discover the answer.



Encourage your child to participate in the activity as much as possible. Praise your child's efforts and successes.







Line up cups



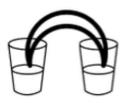
Pour water



Fold paper towel



Add colors



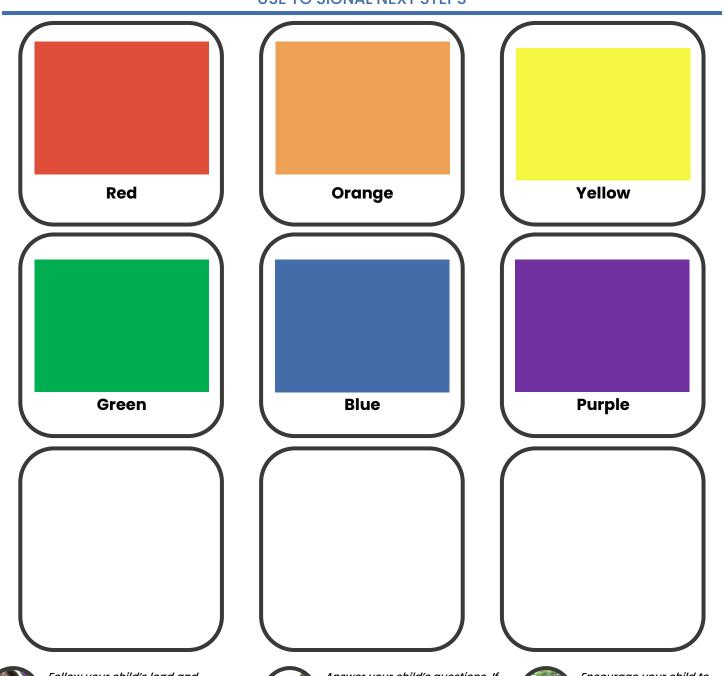
Add paper towel



Watch and wait



VISUAL CUES USE TO SIGNAL NEXT STEPS





Follow your child's lead and interests. Enthusiastically ask your child questions about what they are doing and what they like.



Answer your child's questions. If you do not know the answer, work together with your child to discover the answer.



Encourage your child to participate in the activity as much as possible. Praise your child's efforts and successes.



WALKING RAINBOW

ADDITIONAL ACTIVITY IDEAS

DISCOVERY PLAY ACTIVITIES WITH YOUR YOUNG CHILD

Every child is different, and these are only suggested adaptations and activities. Do what works best for encouraging your child's independent exploration during this suggested play activity. Consult your pediatrician, physical therapist (PT), and/or occupational therapist (OT) first.

- Try the activity with cups you cannot see through or hiding the cup's with an object like a box lid. Encourage the child to use the paper towels only to identify what color water is in each cup.
- Try the activity with liquids other than water, juice, milk, or chocolate milk and see if the same thing happens.
- Explore with your child whether other materials (like their toys, kitchen utensils, etc.) move their color through the paper towels. Help your child predict what will happen, **test** it out, and then review what happened
- · Check out these great books about rainbows:
 - Rainbow by Marion Dane Bauer
 - Rainbows by Martha Rustad
 - Light: Shadows, Mirrors, and Rainbows by Natalie Rosinky



Image Credit: Shutterstock

