Hands-On Learning

Week 8



Independent Study Packet



Educational Activities to Create, Problem Solve, Move, and Have Fun



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This Activity Packet is a collection of open-ended learning challenges that encourage your child to create, build, design, and move. For these activities, you will need materials like paper, tape, markers, and scissors. You will also need other materials, but feel free to substitute with what is around your home.

We recommend allowing your child to choose 2-3 activities per day. Each packet contains a selection of "choice boards," and these can be used over

multiple days. You may also want to review the packet together and make a week long plan using the planner included, or your own.

Brain Breaks can be used throughout the week to support your child in moving their body when they need to take a break from focusing on academic work. The STEM Design Challenge: Plan, Reflect, Revise sheet can be used to help your child dig deeper into the open-ended learning challenges.

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| 1onth: | Days: | ✓ Name:–Year: | |
|-----------------------|--------------------|--|-------------|
| MONDAY To do list: | Course activities: | TUESDAY To do list: — — — — — — — — — — — — — — — — — — — | activities: |
| WEDNESDAY To do list: | Course activities: | THURSDAY Course To do list: | activities: |
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Brain Breaks

What are brain breaks? Young learners often struggle to stay focused for long periods of time. Brain breaks are short periods of time when we take a step away from the routine work we are doing. They are quick and effective ways to energize and refresh our thinking.

Research indicates that brain breaks improve concentration and relieve stress. They increase productivity and provide children with opportunities to develop their social skills and creativity through kinesthetic activities. They also boost brain function! Use these short brain breaks to help refocus before getting back to work.

- 1. Dance Party: Put on some fun music and dance!
- 2. Keep It Up: Get a beach ball and keep it from hitting the ground. Add an additional ball to make it even more fun!
- **3. Jump Counting:** Have your child count while jumping with each count. Challenge them by counting by twos, fives, or tens!
- **4. "Head, Shoulders, Knees, and Toes":** Use a movement song like this one to get your child moving. For added fun, see how fast you can go! This is a great one for young learners.
- **5. Freeze Dance:** Similar to the Dance Party brain break, this one incorporates listening skills. When the music stops, your child must freeze and hold their position until the music begins again.
- 6. Physical Challenges: Engage your child in the classic challenge of rubbing their belly, and patting their head. Another version to try is to grab your nose with your left hand, and grab your left ear with your right hand.



Brain Breaks

- 7. Race in Place: Have your child stand up and run in place. On your signal, your child will get back to work.
- **8. Simon Says:** Play this oldie but goodie to see how well your child can follow specific directions...but only if Simon Says!
- **9. Rock, Paper, Scissors:** Teach your child to play this fun, quick game and see who wins! Best out of three.

For another approach to brain breaks, try these:

- Drawing or coloring
- Mental math: Give a sequence of instructions for learners to follow while doing math in their head.
- Invisible pictures: Have your child draw an invisible picture in the air and try to guess what it is.
- Story starters: Begin a story for one minute and let your child finish the story on their own.



STEM Design Challenge: Plan, Reflect, Revise

Part 1: Plan **Directions:** Create a plan for your STEM design challenge by drawing pictures or writing words in the space provided.



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STEM Design Challenge: Plan, Reflect, Revise

Part 2: Reflect

Directions: Reflect on your STEM design challenge by drawing pictures or writing words in the space provided. Think about the following questions:

- What worked?
- What did you change?
- What did you learn?
- What are you still wondering?

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STEM Design Challenge: Plan, Reflect, Revise

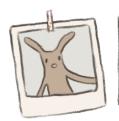
Part 3: Revise **Directions:** Draw a picture and/or write words to show how you would change your design based on what you learned!



Whimsical Activity **Choice Board**

directions: Choose one or more activities to complete at home.

Take pictures of your favorite things in the house. Get help to send them to friends or family with a message about why you took those pictures.

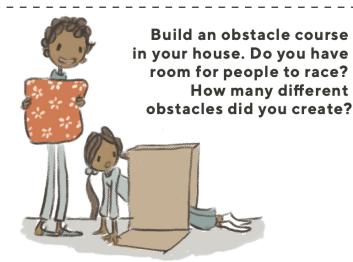






feed me the mouse!

Get an old electronic device that does not work anymore, like an old telephone. Give it a new job as a puppet. Make it "say" and "do" things. What will be the puppet's message?





Host a finger puppet show. Make puppets with paper and tell a story. You can also retell a story you know really well.

Collect flowers, leaves, and other natural ingredients to create a fairy potion. Imagine what would happen if someone drank the potion. Does it affect the way they think, act, or feel?



WARNING: Do not drink the potion or give it to animals or to other people! Use cookie cutters or plastic utensils and play dough to make the habitat of an animal. Then tell a story about the animal's habitat, or tell facts about the animal and its habitat. burrowing owl

Building Brick Challenge: Make a Face

In this design challenge, your child will use building bricks to create a funny face. The activity instructions include question prompts that can help guide your child through the creative process, and promote their problem-solving skills. Playing with building bricks also helps children develop hand-eye coordination and spatial skills.

What You Need:

• Building bricks of any size and shape

What You Do:

- 1. Ask your learner, "Can you make a funny face out of bricks?"
- 2. Encourage your child to make a **plan**. Ask, "How many bricks do you think you will need?" or "What part of the face do you want to make first?"
- 3. Give your child time to **create** their design. Ask, "Do you need help?" (They should ultimately be doing most of the building.)
- 4. Have designers play with their new design. Ask, "What emotion is your face feeling?"
- 5. After testing out the design, challenge your learner to think about the ways in which they can **adjust** their design. Ask, "Is there anything you want to change about the face?"
- 6. Challenge designers to **share** their new designs. They can record a video, or draw a picture of the design and add a few sentences describing it. You can ask and include in your video or article questions, such as "Did you have fun?" and "Does your face have a name?"

Amplify this challenge! Choose one or more of the following questions to add a new level of difficulty to the challenge:

- Can you make a face that looks like you?
- Can you build a body for your face?



robot moves!

Dance Party Choice Board

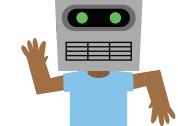
Directions: Choose a song and use one of the following to get your body moving!



Join the ballet: Dress up in your fanciest clothes and become a ballerina on the stage.



Robot dance: Turn into a mechanical robot and see who can do the most realistic



Spotlight dance: Grab a flashlight and take turns dancing in the spotlight.



Dance like a superhero: What kind of



Jump to the beat: Put on some upbeat music

and see who can do the most jumping jacks (or jumps) for the duration of the song. The winner chooses the next move!



Scarf or ribbon dance: Grab some scarves,

ribbons, or long pieces of fabric and dance to the music using your materials as a prop.



Animal dance: Turn on some lively

instrumental music and turn into your favorite animal on the dance floor!



Slow motion dance: Dance as slowly as you

can while still moving your body for the entire song.



Hop in Order

Physical activity comes in many shapes and forms, and often in the entertaining form of games! Physical activity strengthens muscles, bones, and joints, while also supporting mental health, sleep, and other aspects of life. Here is a fun at-home physical activity that encourages movement while also working on literacy or math skills! In this activity geared towards children from preschool through second grade, children will hop in order of game cards of your own making—be it alphabetical order, numerical order, sentence order, skip-counting, story sequence, and more. The variations are endless, and children will enjoy the combination of movement and learning!

What You Need:

- Index cards or blank paper cut down to card size
- Markers

What You Do:

- 1. Get out 5–10 index cards (or small pieces of paper), and write either letters of the alphabet (lowercase or uppercase), numbers (e.g., between 0-20, 100-150, etc.), or sight words on each card.
- 2. Choose a spot—either inside or outside—where there is enough space to move around without knocking anything over.
- 3. Place the cards on the ground in order (such as alphabetical or numerical) and far enough apart to encourage mid-size jumps.
- 4. Invite your child to start at the beginning and hop to the end in the given order or sequence, reading each card aloud. For older kids, you can give them math problems for them to solve (e.g., have them hop to the sum of 5 + 5) or practice reading skills by laying out words that create complete sentences.

Get creative and use different areas around your home and incorporate different movements for subsequent rounds (e.g., tiny hops, jumping on one foot, walking backward). Invite your child to take part in the planning for siblings or other family members, and consider playing as a family!



Animal Movement

Get active at home by pretending to be different animals with this animal movement activity that the whole family can enjoy together. Staying inside or close to home doesn't mean you can't get your body moving in new and exciting ways! Regular physical activity will increase muscle tone, strengthen bones, and support mental health. As you take turns leading others in different animal movements, consider adding your own additions to the game, or moving throughout different rooms or into the yard! Designed for children from preschool through first grade, this fun and engaging activity is a great way to get moving, be silly, and practice gross motor skills.

What You Need:

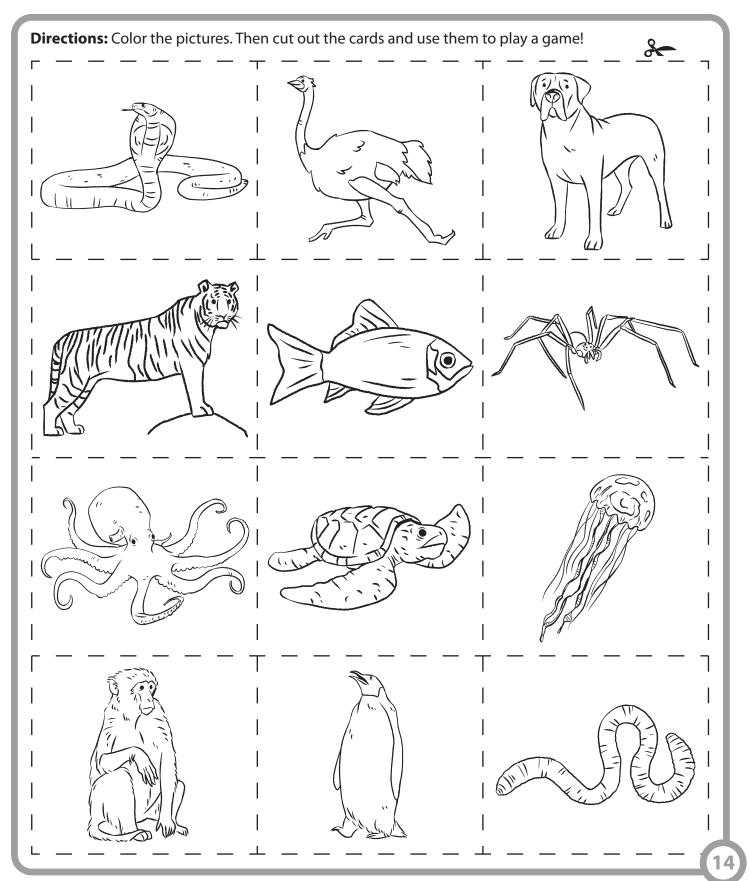
Animal Picture Cards worksheet

What You Do:

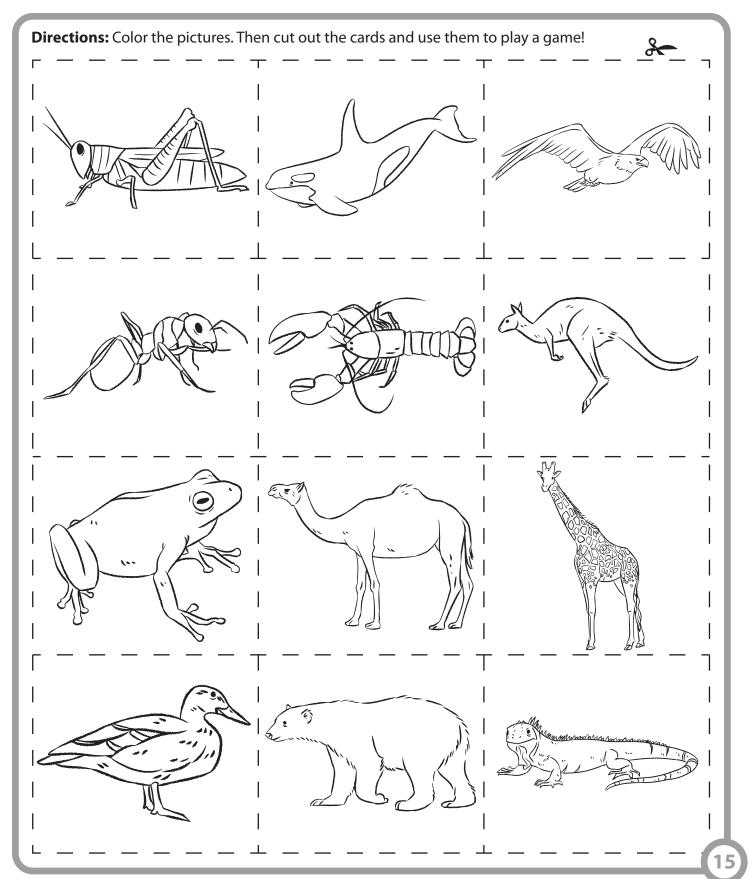
- 1. Cut out the animal cards and place them in a stack face down.
- 2. Ask your child if they want to imitate the movement and sound of each animal or just the movement.
- 3. Decide who will go first, then have that person choose a card from the stack of cards. The player choosing the card will model how to act out the movement of the animal, then all players will copy the movement.
- 4. Continue to play until all the cards have been used up.
- 5. Extend the game by creating your own cards to add to the stack. Challenge your child to write (or have younger children dictate) details about the movement or animal (e.g., a snake slithers).



Animal Picture Cards

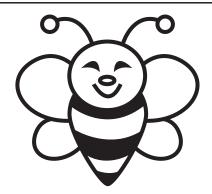


Animal Picture Cards

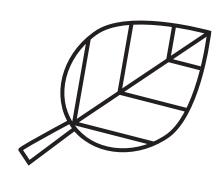


Chalk Walk Choice Board

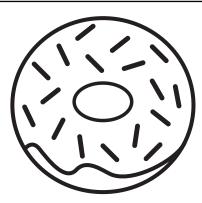
Directions: Take a walk around the neighborhood. Choose one of these encouraging drawing options and draw it on the sidewalk in your neighborhood. Color in the affirmations on the choice board when you finish drawing them.



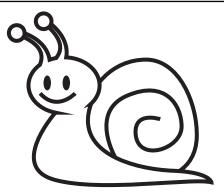
Bee Kind



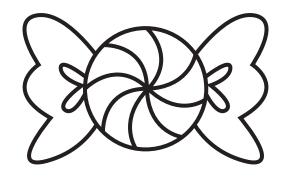
We be-leaf in you!



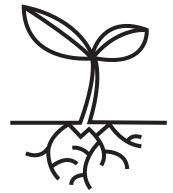
Donut give up!



You snailed it.



Daily Encourage-Mint



We're rooting for you!

Create a Collagraph

Print-making is thought to have originated in China after the invention of paper in the 2nd century AD. This activity features a special kind of print-making called collagraphy, where flat materials are layered and glued onto a base, then painted and used to create a final finished print. Using this ancient art is a great way to teach your child about history and inspire their creativity at the same time.

What You Need:

- Pencil
- Sketch paper
- Cardboard
- Various textured materials, such as burlap, sandpaper, string, or fabric
- Craft glue
- Scissors
- Tempera paint
- White paper
- Black fine point marker

What You Do:

- 1. Before you get started, go online with your child and look at collagraphs by Barbara Garrison, whose works have graced the pages of children's books such as *The Frog House*. Note how the different textures she uses affects the look of the finished picture.
- 2. Have your child think about how they want their finished print to look, and encourage them to make a few sketches.
- 3. Next, have your child use scissors to begin cutting shapes out of the materials, using the sketch as a guide.
- 4. Now they can layer the materials onto the cardboard base, securing them with craft glue. Remind your learner to think about how the different textures and shapes will look after they've been printed.
- 5. Set the collagraph aside, and let it dry for 2–3 hours.
- 6. Once it's dry, it's time to start printing! Have your child paint over the collagraph with tempera paints. They can use as many colors as they want, using different colors for different parts of the painting.
- 7. Have them press the painted collagraph onto a sheet of paper to create their print. They can paint and print their collagraph as many times as they like!
- 8. Set the prints aside to dry.
- 9. When dry, your child can use a fine point marker to add details to finish the artwork.
- 10. Let them pick the perfect spot to display their finished print.



Outer Space Painting

This outer space art project is out of this world! It's filled with colorful planets, rockets, astronauts, satellites, aliens, and anything else your young explorer can imagine. This project is a fantastic way to follow up a space-themed story or movie, or a visit to a science museum or planetarium (in person or online). It's also a great way to extend knowledge of our solar system while encouraging your child's imagination.

What You Need:

- Watercolor paper, 8.5" x 11"
- Crayons (take out the dark colors)
- Black tempera paint
- Water
- Paint palette
- Flat paint brush

What You Do:

- 1. Share photographs of outer space with your child. You can look up images of the solar system, satellites, astronauts, space stations, spaceships, and galaxies. Also, take a look at artist renderings of aliens or outer space fantasy worlds to jump start your child's imagination.
- 2. On white paper, have your child color their version of outer space using crayons. They should use vivid colors and press down hard with the crayons—solid shapes without any paper showing through will give the best results.
- 3. Scoop out some black paint onto a paint palette and check its consistency. If it's thick, add a little bit of water. The paint should be similar to the consistency of hot chocolate.
- 4. Help your child brushing the black paint over the entire picture in even strokes going in the same direction. If the paint is too thick, it won't be resisted by the crayon and will turn the entire picture black. If the paint is too thin, it may go on as gray and require two coats of paint. It's best to test a small section before covering the entire picture.
- 5. Allow the space exploration picture to dry.

Your child can make a whole collection of these space scenes to string up for an out-of-orbit effect!



Make Your Own Puzzle

Sure, you could go out and buy a puzzle at the toy store. But why buy one when it's so easy to make your own puzzle at home? Do-it-yourself puzzles are inexpensive, fun to make, and children can choose or create any design they like. This personalized puzzle is a great way to inspire your child's creativity, and it's an activity you can come back to time and again as the designs and resulting puzzles are endless! Whether you're planning birthday party activities or simply want to engage your child in an arts and crafts project, this DIY puzzle is a great place to start.

What You Need:

- Thin cardboard or posterboard
- Glue
- Scissors
- Craft knife

- Crayons or markers
- Magazines
- Paper

What You Do:

- 1. Help your child to decide if they want to cut out a picture from a magazine or draw their own picture.
- 2. Hand them the markers or crayons if they're drawing their own design, then skip to Step 4. Or, if they'd rather choose a picture from a magazine, let them cut it out, then help them glue the picture to the cardboard. Set it aside to dry.
- 3. When the glue is completely dry, use the scissors to trim the cardboard to fit the picture exactly. Be sure to toss any extra cardboard into the recycle bin.
- 4. This next step needs to be completed by an adult: Use the craft knife to cut the picture on the cardboard into squiggly shapes. The smaller the pieces, the more challenging the puzzle will be.
- 5. When you finish cutting the picture into pieces, mix it up and give it to your child to solve. Good luck putting it back together again!



Write Secret Messages

Your child will feel like a secret agent when you teach them this cool art trick. Write your learner an "invisible" message with white crayon, then watch their amazement as they paint over what looks like a blank piece of paper and see a picture emerging. Then let your child have their own turn at making a secret picture! This creative art project will tap into children's creativity, is a great way to inspire games of playing "secret agent," and can be a challenging exercise in handwriting and spatial awareness.

What You Need:

- White construction paper
- White wax crayons

- Newspaper
- Water soluble paint (tempera paint or watercolor paint)

What You Do:

- 1. Draw a simple image on the white construction paper with the white crayon and write a few simple words.
- 2. Tell your child that the "blank" piece of paper is magic!
- 3. Lay down some newspaper in the painting area, and ask them to paint over the paper with their favorite color. Can they see the image? What is it? Can they identify any letters?
- 4. To commend their excellent detective work, let your child in on the secret and ask them to create their own "magic drawings."
- 5. See if your young detective can guess how the "magic" works. Explain how the waxy crayon puts a "paint-proof" layer of wax on the paper. So when the paint is applied, the areas that have been drawn on are blank!

Variations:

- This is a great way to exchange "secret" drawings and notes with friends who are in the know!
- Let your child make a secret birthday card for a friend. Deliver the card with instructions on how to reveal the hidden message!
- Play an invisible alphabet game with your child! Draw a letter of the alphabet with the white crayon on the white paper and see if your child can guess the letter you have written. Were they right? All they have to do is paint over the letter to see! If your child can read, you can play this game using words instead of letters.

