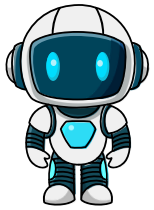
DAY 5 – STEM IN THE FUTURE (March 27)

INFANT & TODDLER ACTIVITIES



1. Move Like Machines

Age: Infants & Young Toddlers

Description / Instructions:

Children explore body movements inspired by robots or machines. Adults model slow, deliberate movements for children to imitate.

Materials:

- Music or rhythm instruments

Recommended Setting:

Large motor area

Advanced Vocabulary:

- Move
- Stop
- Robot
- Machine

Extended Activities:

- Add sound effects
- Sequence two moves

Make It Easier:

- Copy adult movements

Make It More Advanced:

- Combine three movements

DRDP 2025 Measures Targeted:

- **PD 1:** Perceptual-Motor Skills and Movement Concepts
- **PD 2:** Gross Locomotor Movement Skills
- **SED 2**: Social Awareness

2. Novel Material Play

Age: Toddlers

Description / Instructions:

Children explore building with new or unusual materials.

Materials:

- Foam blocks
- Cardboard pieces
- Fabric scraps

Recommended Setting:
Construction or block area
Advanced Vocabulary:

- Build
- Stack
- Try
- Change

Extended Activities:

- Knock down and rebuild
- Combine multiple materials

Make It Easier:

- Use one material

Make It More Advanced:

- Build toward a goal

DRDP 2025 Measures Targeted:

- **ATL 3**: Problem-Solving
- **ATL 2:** Curiosity, Interest, and Initiative
- **PD 4:** Fine Motor Manipulative Skills

3. Light Discovery

Age: Toddlers

Description / Instructions:
Children explore safe light sources (flashlights, light-up toys) and observe effects.

Materials:

- Flashlights
- Light-up toys

Recommended Setting:
Sensory or dimmed area

Advanced Vocabulary:

- Light
- Bright
- Dark
- On
- Off

Extended Activities:

- Shine light on walls or mirrors
- Compare shadow shapes

Make It Easier:

- Single light source

Make It More Advanced:

- Add reflective surfaces

DRDP 2025 Measures Targeted:

- **SCI 1:** Cause and Effect
- **SCI 2:** Inquiry Through Observation and Investigation

PRESCHOOL ACTIVITIES

4. Future Playground Design

Age: Preschool

Description / Instructions:
Children design a playground using drawings or blocks, thinking about fun and safety.

Materials:

- Paper
- Crayons

- Blocks

Recommended Setting:

Art or construction area

Advanced Vocabulary:

- Design
- Plan
- Safe

Extended Activities:

- Build a model

Open-Ended Questions:

- Why did you choose this?

Make It Easier:

- Draw freely

Make It More Advanced:

- Label areas of the playground

DRDP 2025 Measures Targeted:

- **ATL 2:** Curiosity, Interest, and Initiative
- **ATL 3:** Problem-Solving
- **ATL 4:** Planning

5. Helping Machines

Age: Preschool

Description / Instructions:

Children design machines to help people complete tasks.

Materials:

- Recyclables
- Tape

Recommended Setting:

STEM/blocks/makerspace area

Advanced Vocabulary:

- Machine
- Help
- Improve

Extended Activities:

- Test and redesign

Open-Ended Questions:

- What does it help with?

Make It Easier:

- Adult guidance

Make It More Advanced:

- Peer collaboration

DRDP 2025 Measures Targeted:

- **ATL 2:** Curiosity, Interest, and Initiative
- **ATL 3:** Problem-Solving
- **ATL 4:** Planning

6. Future Transportation

Age: Preschool

Description / Instructions:
Children design futuristic vehicles and explain how they work.

Materials:

- Blocks
- Paper
- Crayons

Recommended Setting:
Construction area

Advanced Vocabulary:

- Future

- Travel
- Vehicle

Extended Activities:

- Compare with today's vehicles

Open-Ended Questions:

- How does it move?

Make It Easier:

- Draw only

Make It More Advanced:

- Add moving parts

DRDP 2025 Measures Targeted:

- **ATL 2:** Curiosity, Interest, and Initiative
- **ATL 3:** Problem-Solving
- **ATL 4:** Planning

7. Sustainable City

Age: Preschool

Description / Instructions:
Children build a city emphasizing recycling, green spaces, and energy-saving ideas.

Materials:

- Recyclables
- Blocks

Recommended Setting:
Construction area

Advanced Vocabulary:

- Recycle
- Environment
- City

Extended Activities:

- Discuss sustainability

Open-Ended Questions:

- How does this help the Earth?

Make It Easier:

- Fewer materials

Make It More Advanced:

- Add city rules

DRDP 2025 Measures Targeted:

- **ATL 2:** Curiosity, Interest, and Initiative
- **ATL 3:** Problem-Solving
- **ATL 4:** Planning
- **SCI 2:** Inquiry Through Observation and Investigation
- **SCI 3:** Documentation and Communication of Inquiry

8. Coding Without Computers

Age: Preschool

Description / Instructions:
Children follow and create sequences of movements, simulating coding.

Materials:

- Direction cards
- Open floor

Recommended Setting:
Large motor area

Advanced Vocabulary:

- Sequence
- Code
- Step

Extended Activities:

- Create peer sequences

Open-Ended Questions:

- What comes next?

Make It Easier:

- Two-step sequences

Make It More Advanced:

- Debug errors

DRDP 2025 Measures Targeted:

ATL 3: Problem-Solving
ATL 4: Planning
SCI 2: Inquiry Through Observation and Investigation

9. Future Problem Solvers

Age: Preschool

Description / Instructions:
Children brainstorm solutions to challenges they might face in the future.
Materials:

- Paper
- Markers

Recommended Setting:
Circle time
Advanced Vocabulary:

- Innovate
- Solve
- Idea

Extended Activities:

- Group collaboration

Open-Ended Questions:

- What could help?

Make It Easier:

- Adult prompts

Make It More Advanced:

- Peer discussions

DRDP 2025 Measures Targeted:

ATL 3: Problem-Solving
ATL 4: Planning
SCI 2: Inquiry Through Observation and Investigation

10. My STEM Future

Age: Preschool

Description / Instructions:
Children draw themselves in a STEM role or career in the future.

Materials:

- Paper
- Crayons

Recommended Setting:
Art area

Advanced Vocabulary:

- Future
- Engineer
- Scientist

Extended Activities:

- Share drawings with the class

Open-Ended Questions:

- What will you do?

Make It Easier:

- Free drawing

Make It More Advanced:

- Label drawings

DRDP 2025 Measures Targeted:

SED 2: Social Awareness
ATL 4: Planning
FLD 6: Writing

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