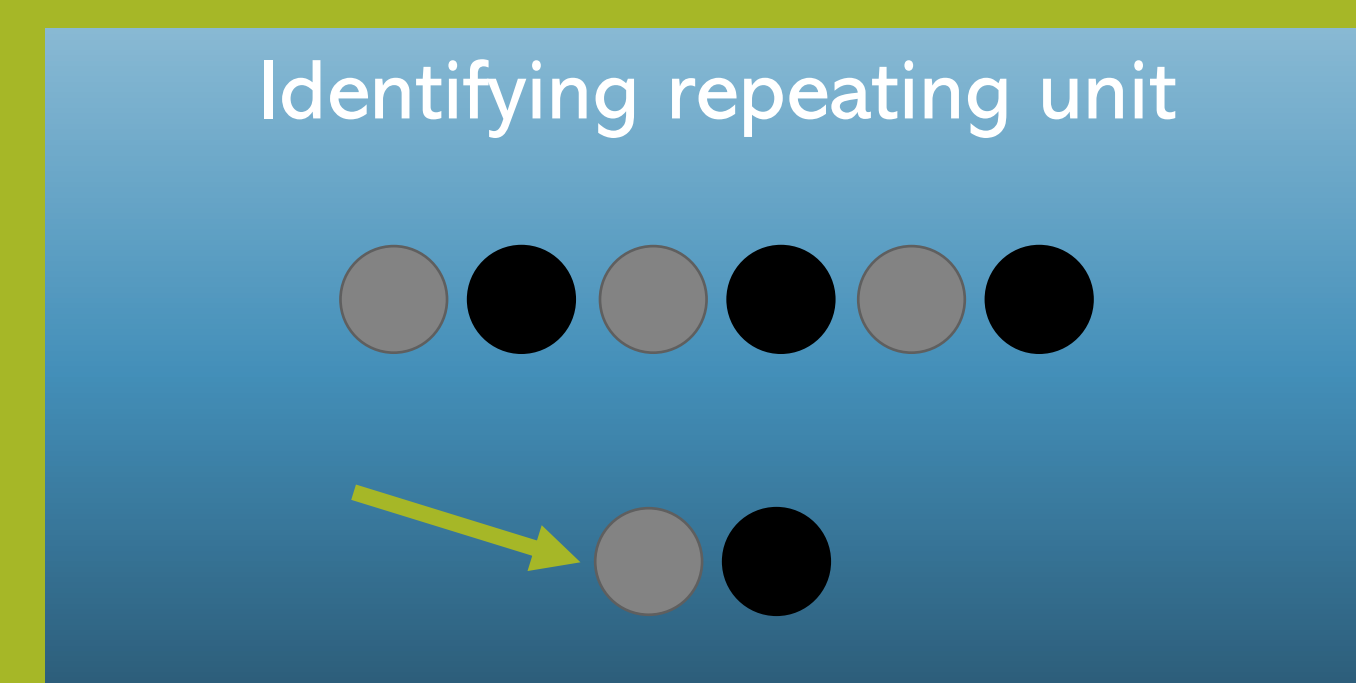
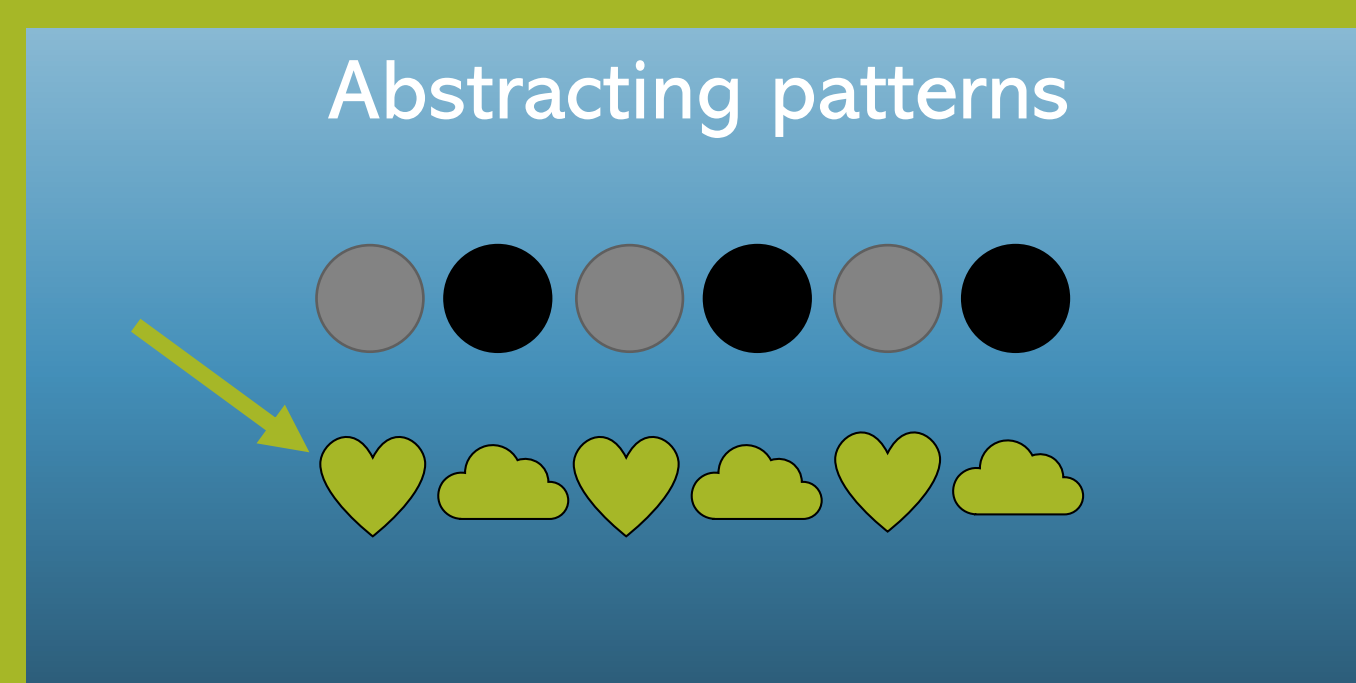
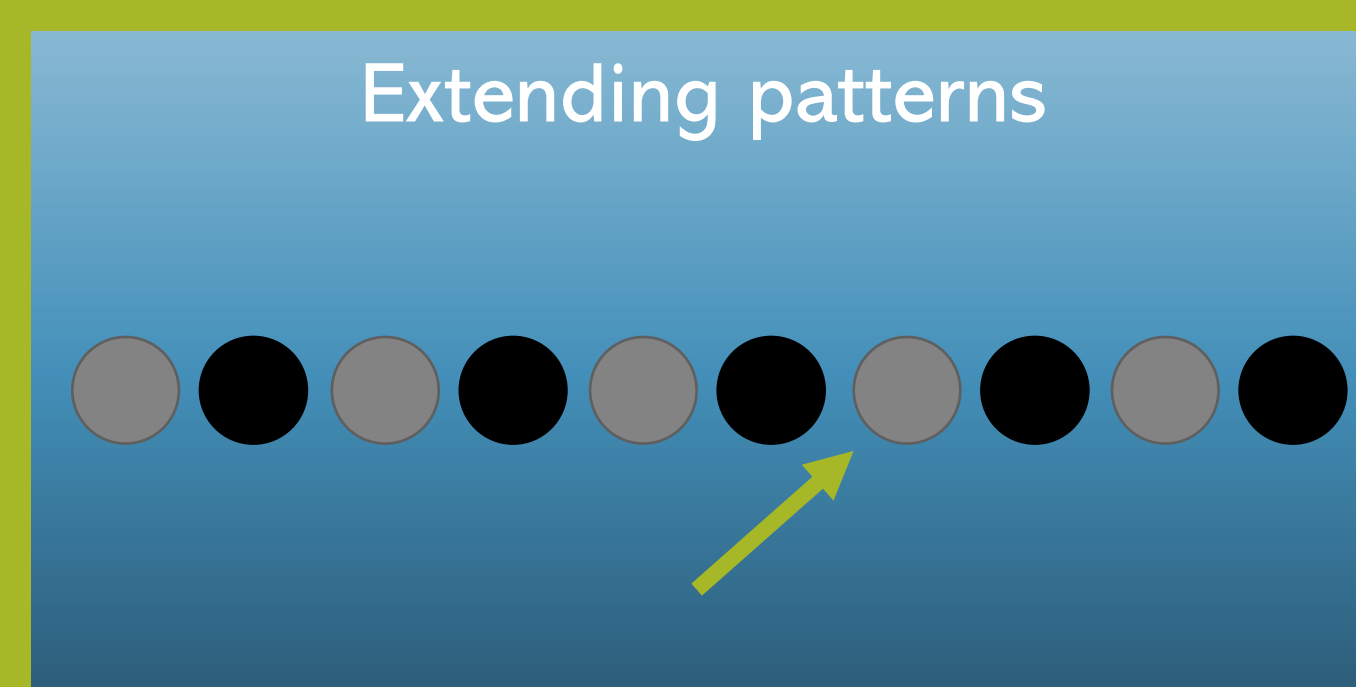
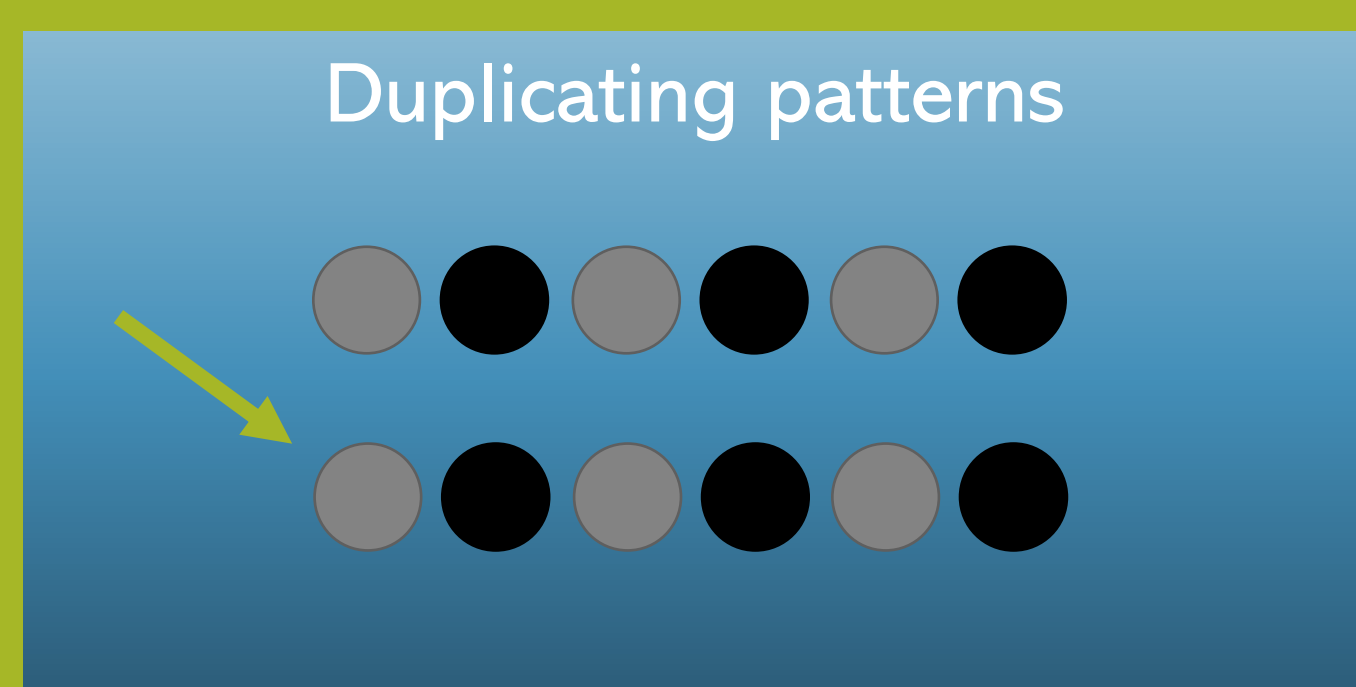


TEACHING PATTERNING TO PRESCHOOLERS

Jessica K. Hardy, University of Illinois Urbana-Champaign

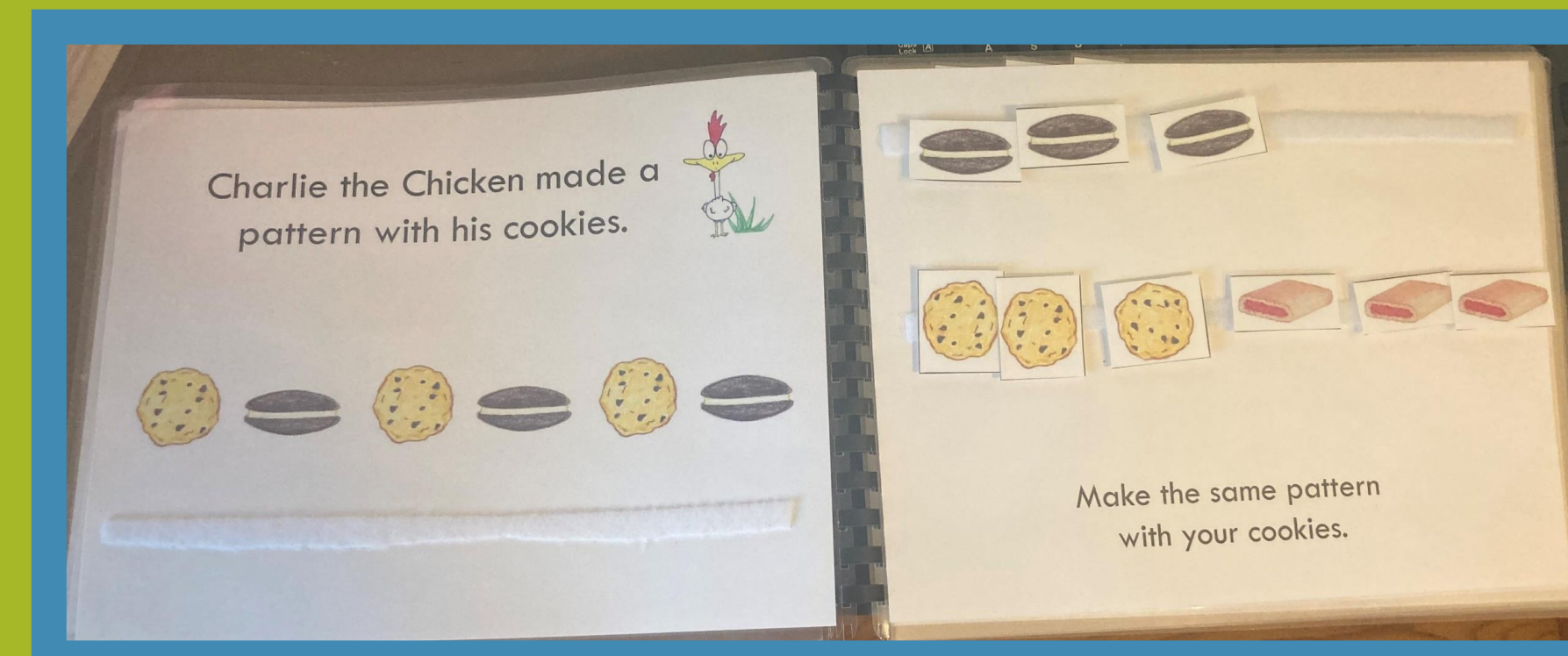
WHAT IS PATTERNING?

- “Finding regularities in how things are ordered, duplicating and extending observed patterns, and creating patterns” (Hardy & Hemmeter, 2014).
- Sample skills:

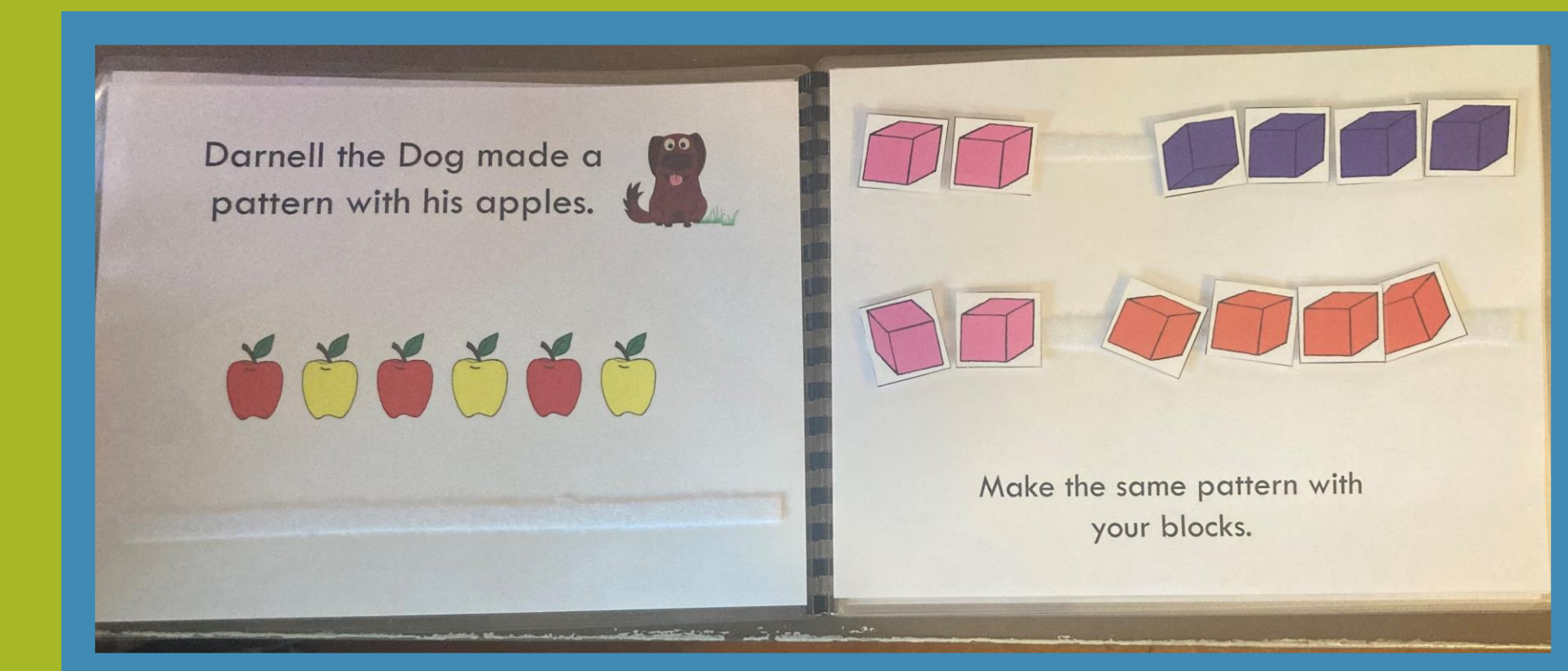


MATERIALS

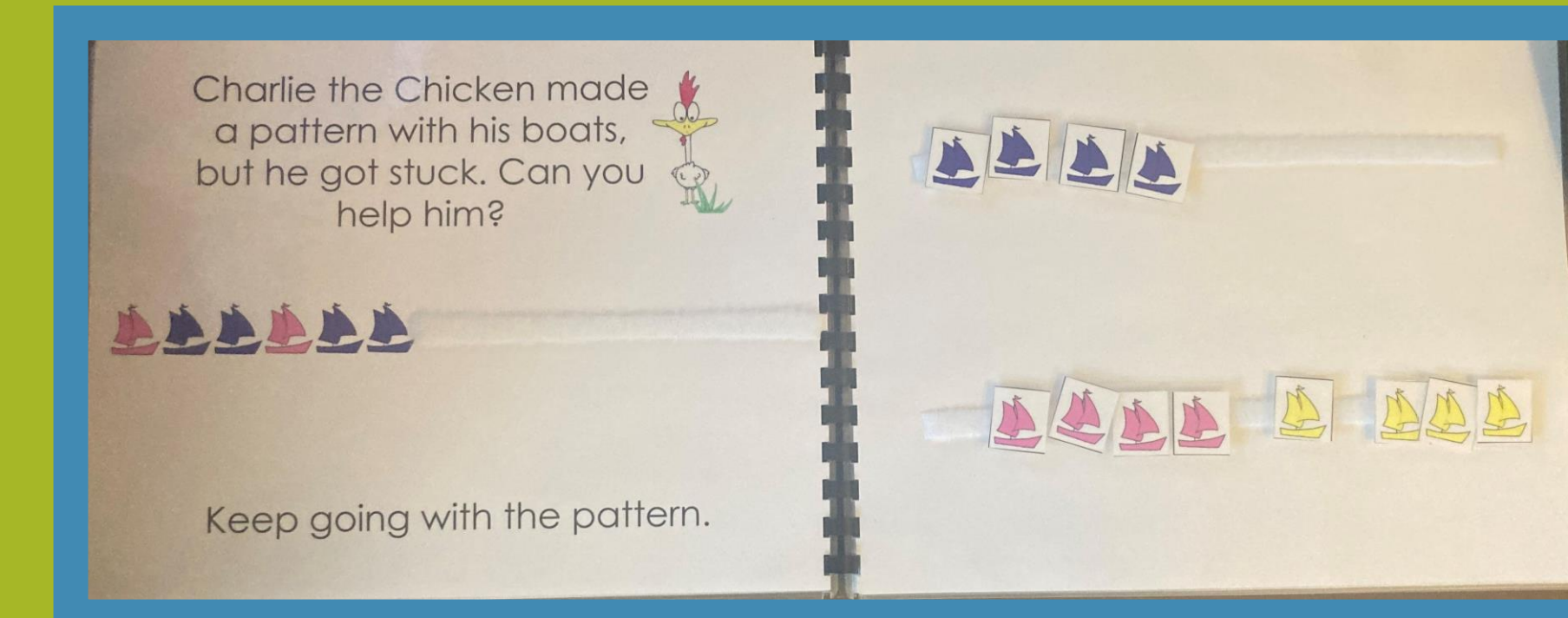
- Consider how you can use diverse materials to teach patterning, such as manipulative toys (e.g., small blocks, counting bears), loose parts (e.g., spools, buttons), and natural materials (e.g., shells, rocks).
- You can also use books, including ones you make yourself.



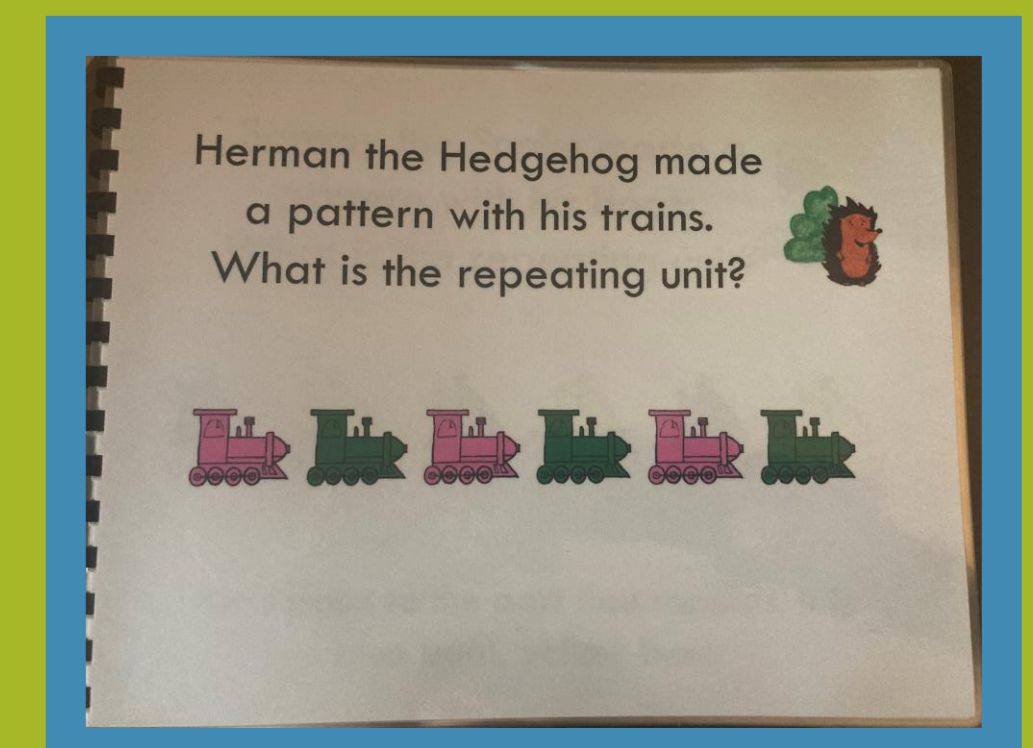
Duplicating AB patterns



Abstracting AB patterns



Extending ABB patterns



Identifying repeating units

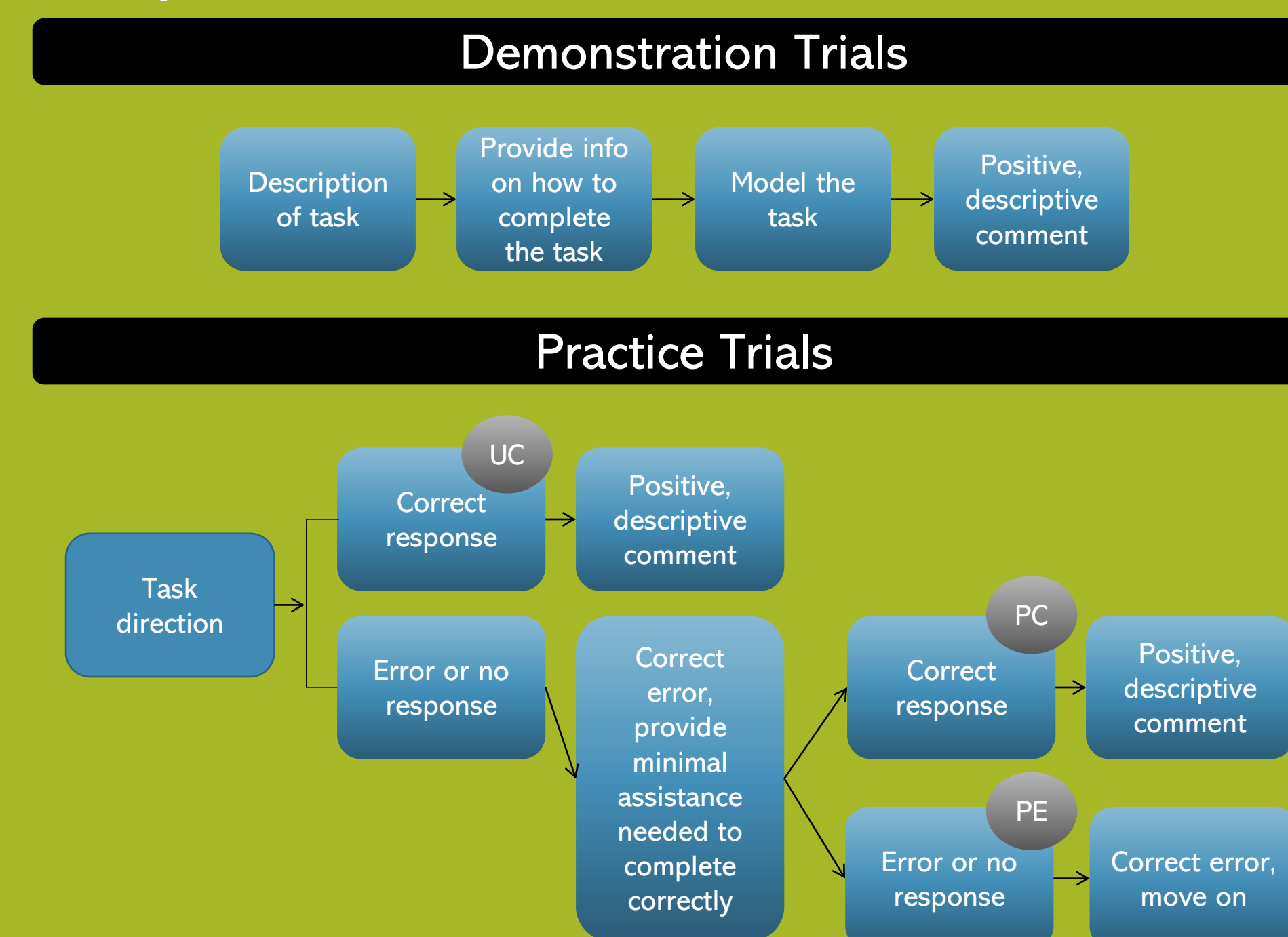
OPERATIONALIZING SKILLS

- Operationalizing skills is critical, as it requires you to have specified what behaviors you are looking for, which helps you plan how to teach the skills and measure them accurately and consistently.

Skill	Definition	Non-examples
Duplicating patterns	When presented with a model pattern and additional materials, child reproduces the pattern with the additional materials. At least three units are included, and no incorrect units are included.	Child reproduces the pattern correctly but then adds additional items to the end or beginning; does not reproduce the pattern correctly; or partially reproduces the pattern.
Extending patterns	When presented with a pattern and additional materials, child extends the pattern at least two units, adding to the existing pattern on either end.	Child extends incorrectly; extends correctly but then adds additional items to the end or beginning; or partially extends the pattern (less than two units).
Abstracting patterns	When presented with a pattern and new materials, child creates a pattern with the new materials. At least three units are included, and no incorrect units are included.	Child creates a different pattern; puts items in an order that is not a pattern; partially reproduces the pattern (less than three units); or reproduces the pattern correctly with new materials but then adds additional items to the end or beginning.
Identifying repeating unit	When presented with a pattern, child names repeating unit using the attributes of the pattern (e.g., red-blue). Child does NOT repeat the unit more than once (e.g., red-blue-red-blue-red-blue).	Child says wrong unit; or says correct unit more than once.

TEACHING STRATEGIES

- Demonstration-practice procedure (Hardy et al., 2017)



- Consider what you can use to reinforce correct responses—such as descriptive praise. Remember to consider the child’s preferences when determining a reinforcer (Hardy & McLeod, 2020).

REFERENCES

- Hardy, J. K., Hawkins, S., Hemmeter, M. L., & Grisham-Brown, J. (2017). Promoting math skills. In J. Grisham-Brown & M.L. Hemmeter (Eds.), *Blended practices for teaching young children in inclusive settings (2nd ed.)*, (pp. 311-344). Brookes.
- Hardy, J. K., & Hemmeter, M. L. (2014). Assessing early academic skills. In M. McLean, M.L. Hemmeter, & P. Snyder (Eds.), *Essential elements for assessing infants and preschoolers with special needs* (pp. 271-315). Pearson Publishing Co.
- Hardy, J. K., & McLeod, R. (2020). Using positive reinforcement with young children. *Beyond Behavior, 29*(2), 95-107. <https://doi.org/10.1177%2F1074295620915724>