

DRAFT UNIT PLAN - Prekindergarten: Count to tell the number of objects

MSDE Mathematics Lesson Seed Organizer for Prekindergarten: Subitizing

Lesson Seeds: *The lesson seeds are ideas for the domain/standard that can be used to build a lesson. Lesson seeds are not meant to be all-inclusive, nor are they substitutes for instruction.*

Domain: Counting and Cardinality

Cluster: Count to tell the number of objects.

Standard: PK.CC.5 Represent a number (0-5, then to 10) by producing a set of objects with concrete materials, pictures, and/or numerals (with 0 representing a count of no objects)

Purpose/Big Idea: Subitizing

<http://teacherweb.com/wa/nachesvalleyprimaryschool/msclark/Subs.PDF>

Materials:

- Small container with a set of 4 counters for each child
- Resource Sheet 10: Counting Place Mat (one per student)
- Set of 4 counters for teacher
- Placemat for teacher
- Dish towel
- Resource Sheet 4: Dot Cards (for teacher use with small or larger groups of students)
- Resource Sheet 6: Memory Game Cards (Use the dot cards in this set for student use)

Activity:

Setting: small group sitting in a semi circle on the floor or at a small table;

Notes: Have each child place their placemat in front of them with their counter container placed in front of their placemat. Place your placemat in front of you with your container visible.

Activity: Level 1

- Explain to the children that today they are going to play a game using their brains and their counters.
- Explain that you are going to place 1, 2, 3, or 4 counters on your mat and that the children will only be able to look at the counters for a few seconds. (Demonstrate counting quickly to 5 to show them the short amount of time they will get to look.)
- Explain that then the children have to place the same number of counters they just saw on their own mats using their own counters.
- Ask children to close their eyes. Place 2 counters on your placemat in a line.
- Have the students open their eyes. Silently count quickly to five and cover your counters.
- Have the children place the same number of counters on their placemat.

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- Ask the children to then say verbally the amount of counters that are showing.
- Repeat this process, pretending that you are going to “trick” them on the next turn.
- Once children are successful with being able to place the same number when they see the counters placed in a row, repeat the activity but place the counters on the placemat in the form of a rectangle, moving forward to counters being placed in simple arrangements.
- After completing this activity for sets of counters in different arrangements while playing “the game” ask children to explain:
 - **“How did you know how many counters to put down on your mat when I had my counters covered with a dish towel?”**
(Students should respond, I made a picture in my mind. However, the teacher may have to help students verbalize this in the beginning by saying something like, **“Well, when I play this game, I make a picture in my mind of the counters I see on the mat. That way, when I have to put down the counters, I can look in my mind to see the answer.”**)

Level 2:

- Have students close their eyes. Place a set of 1 to 4 objects on the teacher’s mat.
- Students open their eyes and the objects are quickly covered.
- Students must quickly say the number of objects they just saw.
- For students who are having difficulty identifying the amount quickly, go back to placing the objects in a single line.

Level 3:

- Create a set of “dot cards” showing different arrangements of the numbers 1-4.
- Flash a card (from Resource Sheet 4) at the students and have them verbally say the amount represented.
- Electronic cards could also be created to be quickly shown on a Smart Board or presenter.
- Provide each child with a set of “dot cards” (from Resource Sheet 6) representing numbers 1-4. Have students spread the “dot cards” out in front of them. The teacher calls out a number and the students hold up a card representing that amount.

Enrichment: Extend the activity to numbers greater than 4, if appropriate.

Additional Resources:

<http://teachmath.openschoolnetwork.ca/Subitizing.htm>

<http://www.fcpsteach.org/docs/subitizing%20cards.pdf>

http://www.uwosh.edu/coehs/mindsongmath/concepts/documents/Complete_Large_Circles_Flash.pdf

<http://www.moviemakers.ca/downloads.php>

<http://sites.google.com/site/numbersense11/subitizing>

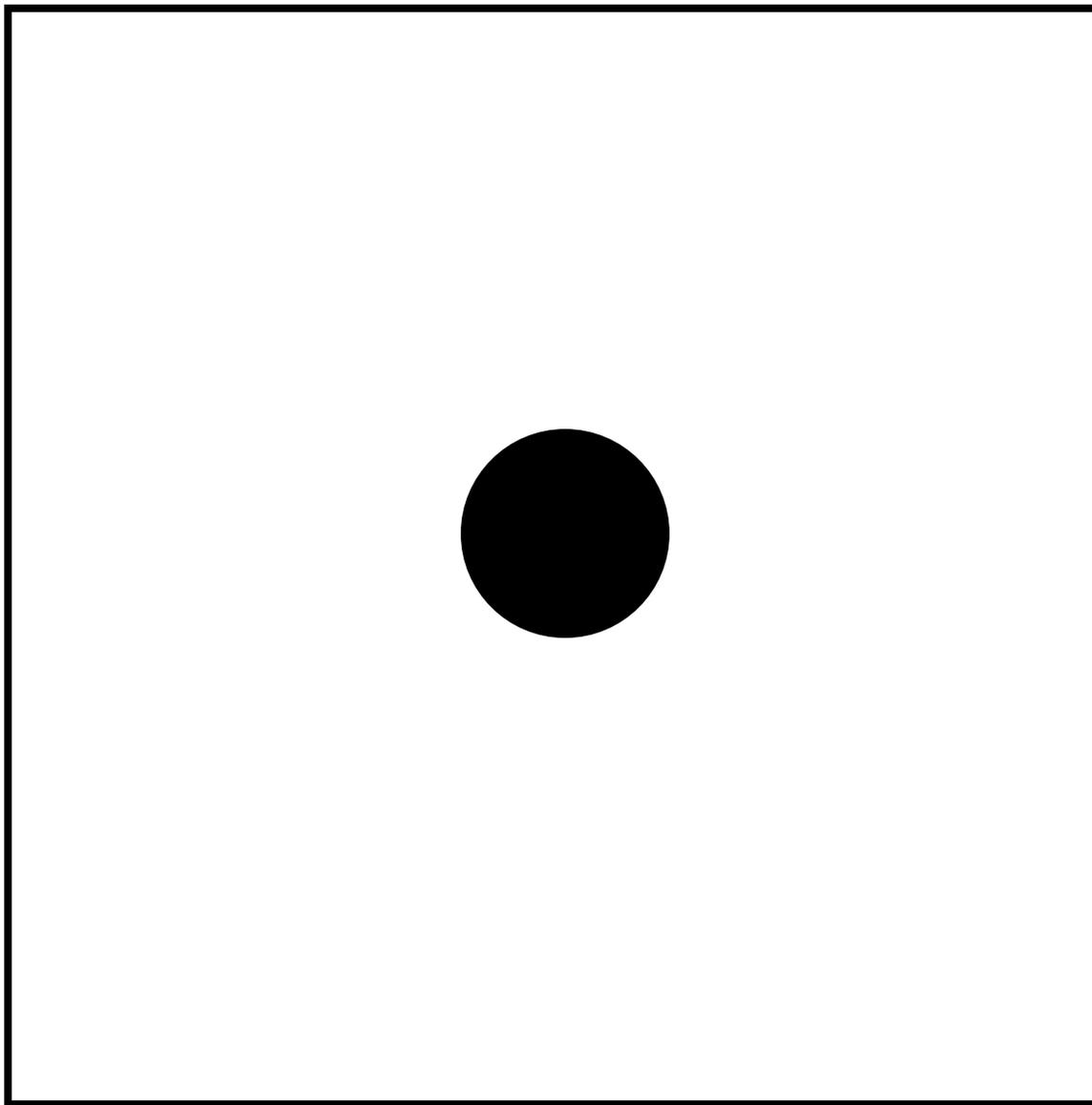
Guiding Questions:

- *How do you know how many counters to put down?*
- *How do you know that the dots on this card equal....?*

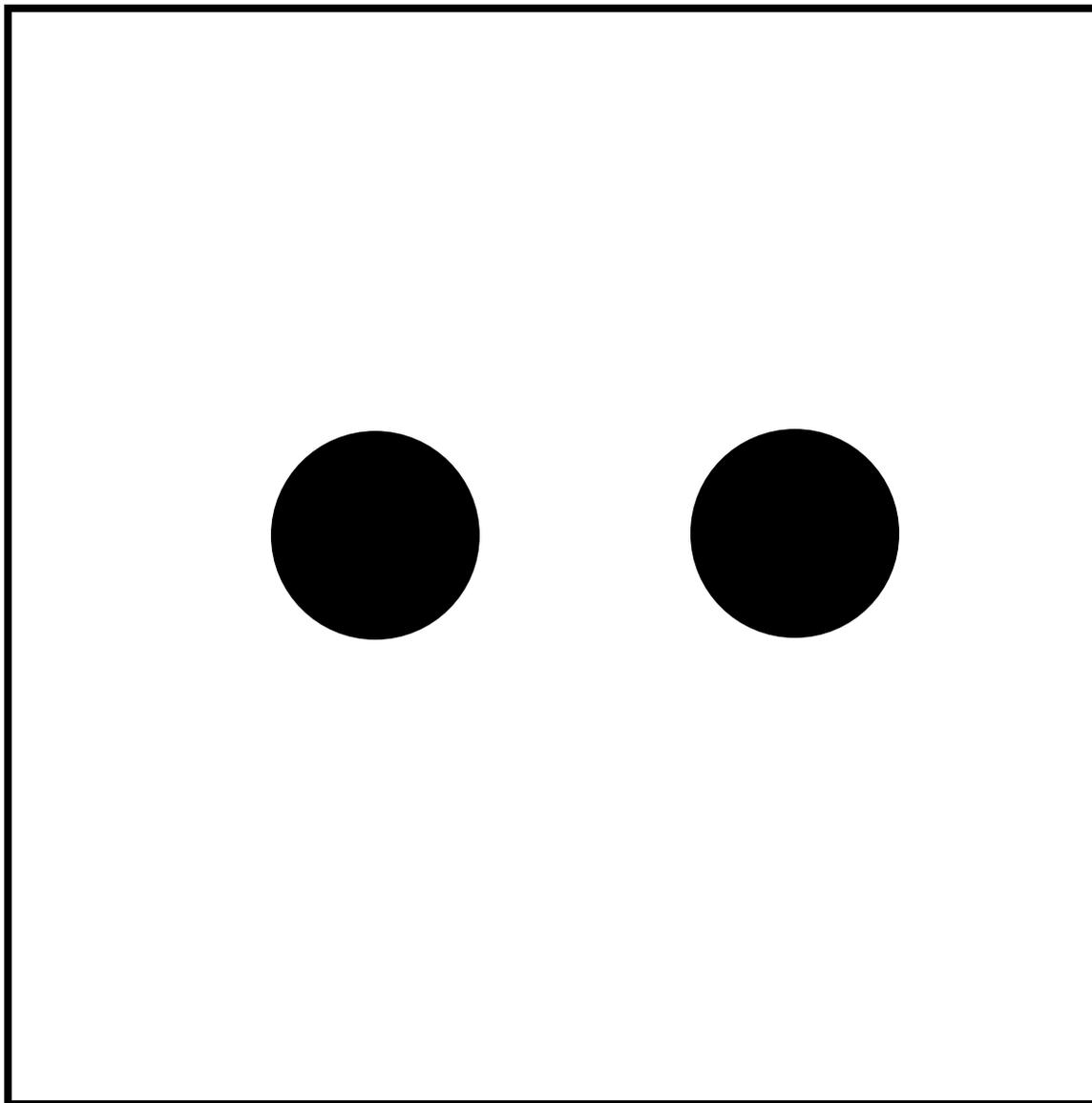
Counting Place Mat



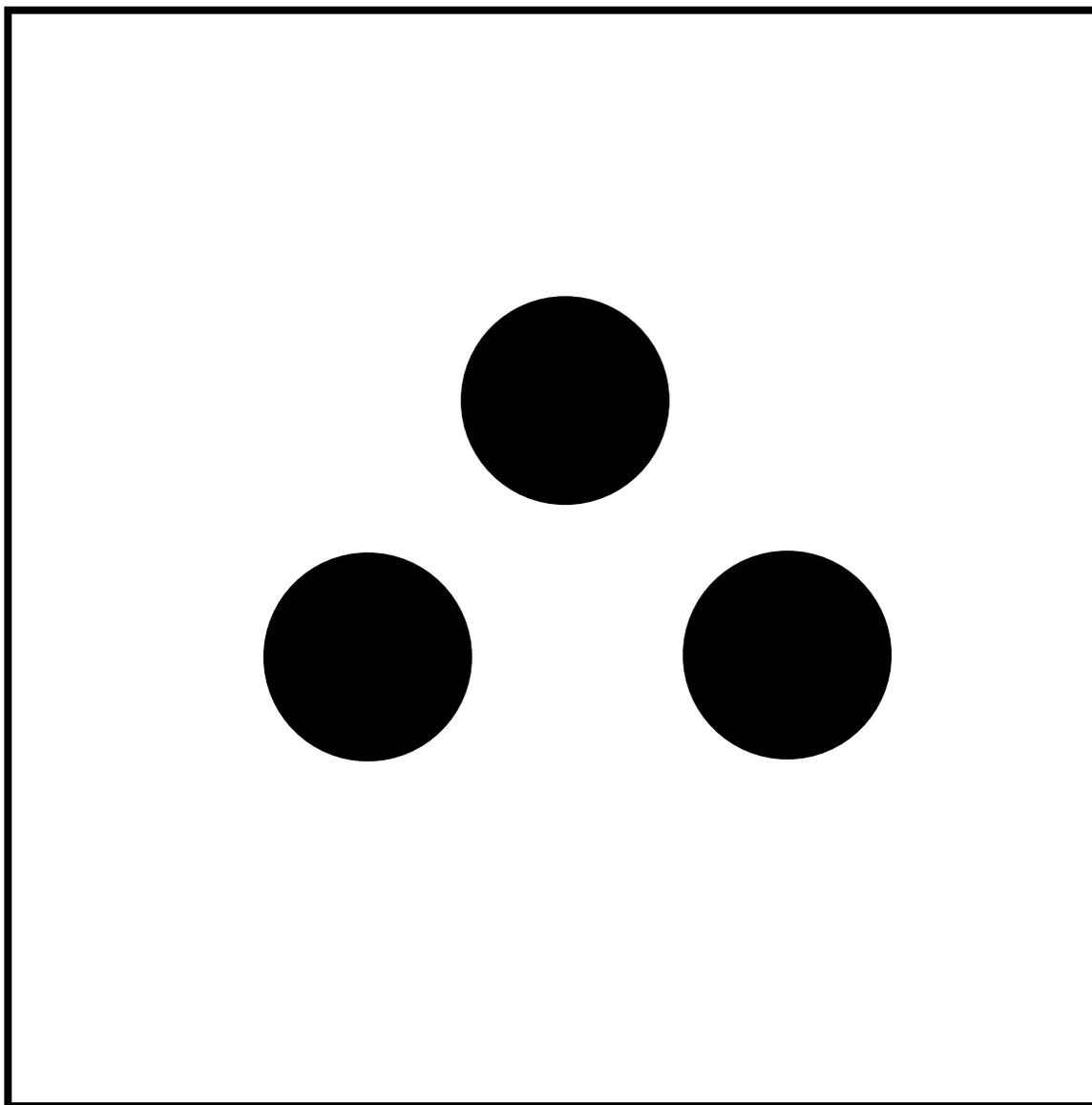
Dot Cards



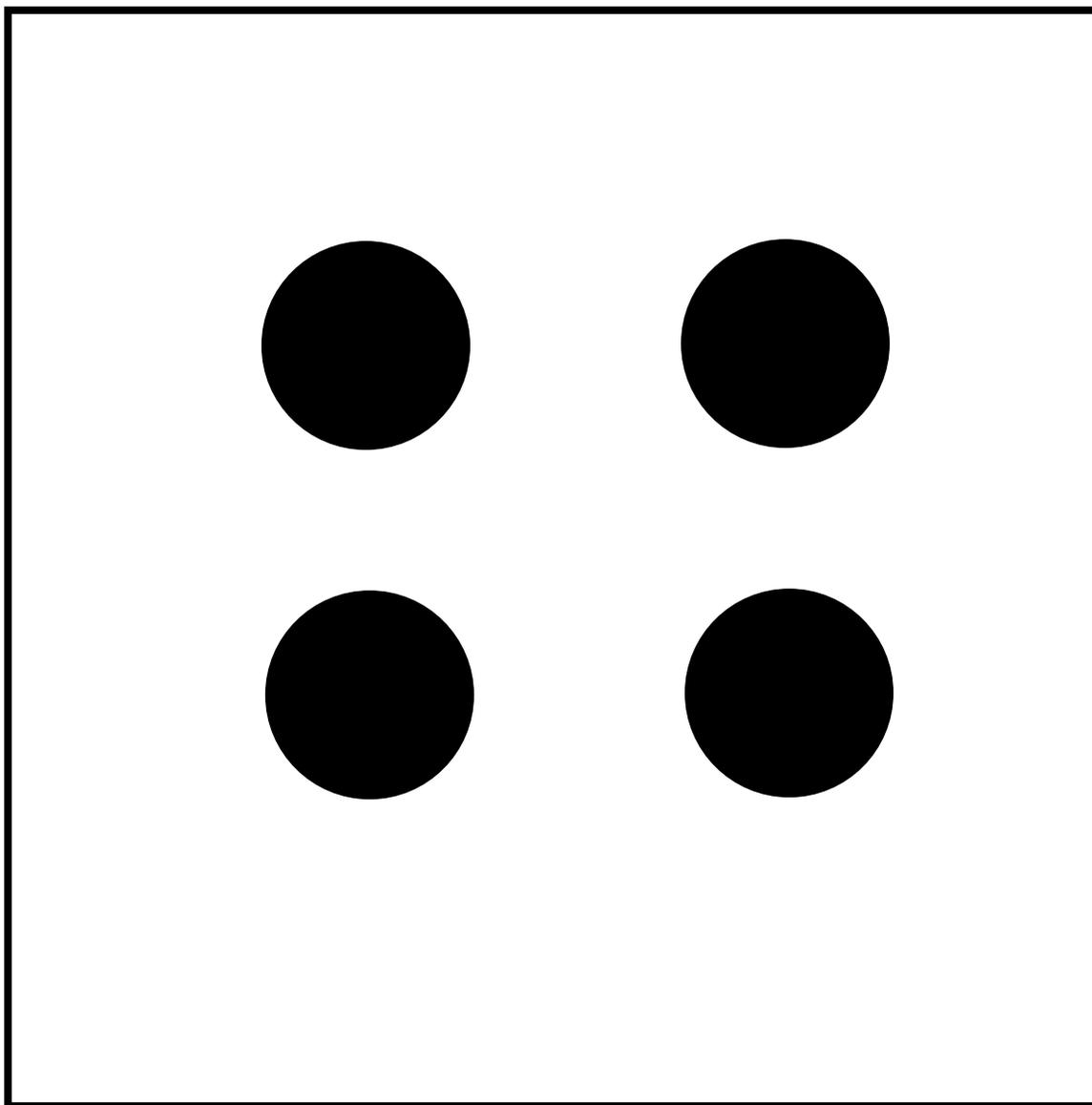
Dot Cards



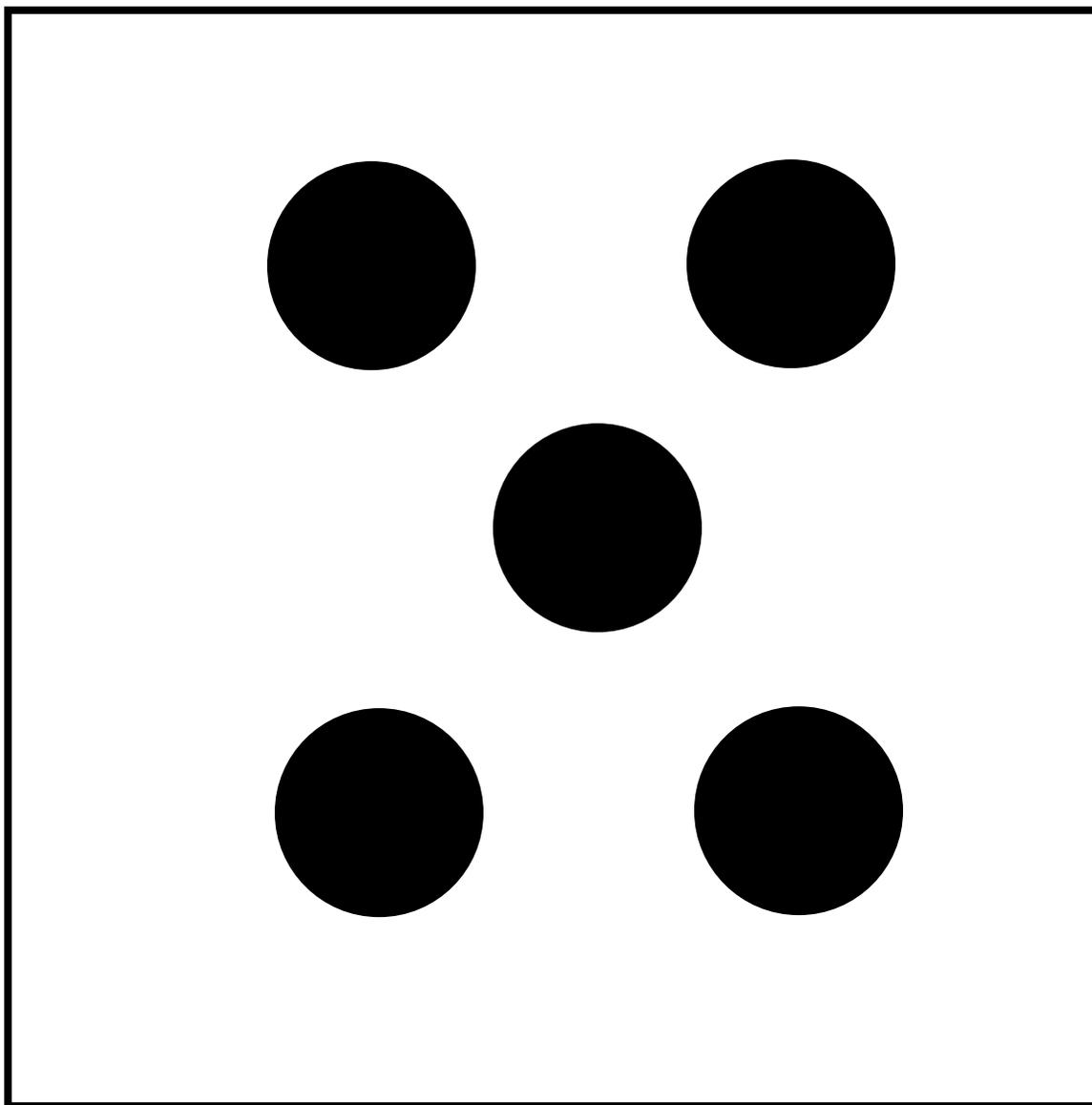
Dot Cards



Dot Cards



Dot Cards



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Resource Sheet 6

Memory Game Cards

1	2	3	4	5
		