Just In Time Quick Check

[Standard of Learning (SOL) 1.12a](https://www.doe.virginia.gov/home/showpublisheddocument/2934/637982463289900000)

| Strand:Probability and Statistics |
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| Standard of Learning (SOL) 1.12a***The student will collect, organize and represent various forms of data using tables, picture graphs, and object graphs.***  |
| Grade Level Skills: * Collect and organize data using various forms of data collection (e.g., counting and tallying, informal surveys, observing, voting.) Data points, collected by students, should be limited to 16 or fewer for no more than four categories.
* Represent data in tables, picture graphs and object graphs.
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| [**Just in Time Quick Check**](#quick)  |
| [**Just in Time Quick Check Teacher Notes**](#teacher) |
| Supporting Resources: * VDOE Mathematics Instructional Plans (MIPS)
	+ [1.12ab - Data Collection](https://www.doe.virginia.gov/home/showpublisheddocument/16582/638037078588100000) (Word) / [PDF Version](https://www.doe.virginia.gov/home/showpublisheddocument/16584/638037078595900000)
* VDOE Word Wall Cards: Grade 1  [(Word)](https://www.doe.virginia.gov/home/showpublisheddocument/18638/638041054248300000)  | [(PDF)](https://www.doe.virginia.gov/home/showpublisheddocument/18640/638041054259400000)
	+ Picture Graph
	+ Table
	+ Tally marks
 |
| Supporting and Prerequisite SOL**:** [1.2b](https://www.doe.virginia.gov/home/showpublisheddocument/24336/638044665272230000), [K.2a](https://www.doe.virginia.gov/home/showpublisheddocument/24232/638044615426770000), [K.2b](https://www.doe.virginia.gov/home/showpublisheddocument/24236/638044615437070000), [K.11a](https://www.doe.virginia.gov/home/showpublisheddocument/24296/638044624800430000) |

SOL 1.12a - Just in Time Quick Check

1. A class was asked about their favorite animal.
* 4 children liked fish
* 6 children liked dogs
* 2 children liked cats

Tally the data in the chart below.

| Fish | Dogs | Cats |
| --- | --- | --- |
| 0 | 0 | 0 |

1. A class records the number of sunny days, rainy days and snowy days in this table.

|  |  | **picture of a snowflake** |
| --- | --- | --- |
| **2** | **3** |  |

Use the data from the table to create a picture graph.

|   | **0** |
| --- | --- |
|  | 0 |
|  **a picture of a snowflake** | **0** |

SOL 1.12a - Just in Time Quick Check Teacher Notes

**Common Errors/Misconceptions and their Possible Indications**

1. A class was asked about their favorite animal.
* 4 children liked fish
* 6 children liked dogs
* 2 children liked cats

Tally the data in the chart below.

| Fish | Dogs | Cats |
| --- | --- | --- |
|  |  |  |

*Some students may struggle to represent the data correctly using tally marks. These students will need additional experiences seeing tally marks modeled and using tally marks to represent data. Providing daily opportunities for students to record data using tally marks will be beneficial. Ideas for recording with tallies might include: having students record on their paper or in their notebook the number of students in their small group who are wearing sneakers today or recording how many students are buying lunch today. Daily class questions can provide the opportunities students need to become comfortable using tally marks to record data.*

1. A class records the number of sunny days, rainy days and snowy days in this table.

|  |  | **picture of a snowflake** |
| --- | --- | --- |
| **2** | **3** |  |

Use the data from the table to create a picture graph.

|   | **0** |
| --- | --- |
|  | 0 |
|  **a picture of a snowflake** | **0** |

*Students who struggle to create a picture graph representing this data may try to make boxes or turn this into a bar graph instead of a picture graph. They may also be confused by the horizontal placement instead of a vertical placement. These students would benefit from opportunities to turn object graphs into picture graphs and discuss how they represent the same data.*

*Some students who have trouble with the concept of zero may still place a snowflake in the snowy day category. Providing students with opportunities to create picture graphs where one or more categories contain zero data points will be beneficial. Classroom discussions focused on what it means when there are no data points in a category will be very beneficial as students make sense of and represent data accurately.*