|  |  |  |  |
| --- | --- | --- | --- |
| Activity | Time | Description/Prompt | Materials |
| Video: Mistakes | 3 minutes | Video:<https://vimeo.com/125927213>  | * Projector
* Video
 |
| Video Discussion | 2 minutes | Questions for the Discussion is from BCPS1. What type of behaviors are used by successful people in the world? Which of these do you feel are the most important?
* Go against traditional ideas.
* Play with ideas without judging them.
* Be open to different experiences.
* Keep going through difficulties.
* Feel comfortable being wrong.
* Try seemingly wild ideas.
 |  |
| Journal Prompt | 5 minutes | Journal Prompt is from BCPS* Why is it good to make a mistake in math? Explain your thinking.
 | * Journal
* Pencil
 |
| [Growing Shapes](https://bhi61nm2cr3mkdgk1dtaov18-wpengine.netdna-ssl.com/wp-content/uploads/2017/07/WIM-Day-5-gr-5-9-vF.pdf) | 25 minutes | 1. How do you see the shapes growing? Ask students to think alone at first.
2. Ask students to share their methods, drawing them on the board.
3. Name the methods, with the students’ name and possibly a method name e.g. the raindrop method.
4. Ask students to find out how their group saw the shapes growing.
5. Ask students to think about the 100th case.
6. Ask the students to construct tables and link their number and visuals.
7. Possibly ask them to think about generalization and variable.
 | * Paper
* Pencil
* Markers
* Shapes Task, page 4. One copy per student.
* Shapes Task for display, page 5.
* One page of chart paper per group if you want to have classroom posters.
 |
| Group Presentations | 5 minutes | Ask students to share any patterns or other interesting observations.  |  |
| Closing | 3-5 minutes | Review the key concepts:* Mistakes Grow Your Brain!
 |  |

Extensions:

* Show an algebraic expression and a visual proof for the number of squares in the nth case.
* Which case would have 289 squares?