

MINECRAFT + PATTERNING

BRIAN ASPINALL
@MRASPINALL
TEACHER, LKDSB

iTunes Preview

[Overview](#)[Music](#)[Video](#)[Charts](#)

Minecraft: Pocket Edition

[View More by This Developer](#)

By Mojang

Essentials

Open iTunes to buy and download apps.



View in iTunes

+ This app is designed for both iPhone and iPad

\$7.99

Description

Play the biggest update to Minecraft: Pocket Edition so far! It's the overhaul of a generation. Download it now and see for yourself!

[Minecraft: Pocket Edition Support](#)

[...More](#)

What's New in Version 0.11.1

Custom skins

- Skins! Change your in-game look by uploading your own skin or choosing one from our downloadable packs
- Just so you know, the skins update is compatible with Minecraft: Skin Studio, available from the App Store

[...More](#)

WHAT IS MINECRAFT?

Minecraft

Video game

Minecraft is a sandbox independent video game originally created by Swedish programmer Markus "Notch" Persson and later developed and published by the Swedish company Mojang. [Wikipedia](#)

Initial release date: May 17, 2009

Series: [Minecraft](#)

Developers: Mojang, 4J Studios

Designers: Markus Persson, Jens Bergensten

Awards: Kids' Choice Award for Favorite Videogame, [more](#)

Platforms: Android, PlayStation 3, PlayStation 4, PlayStation Vita, [more](#)



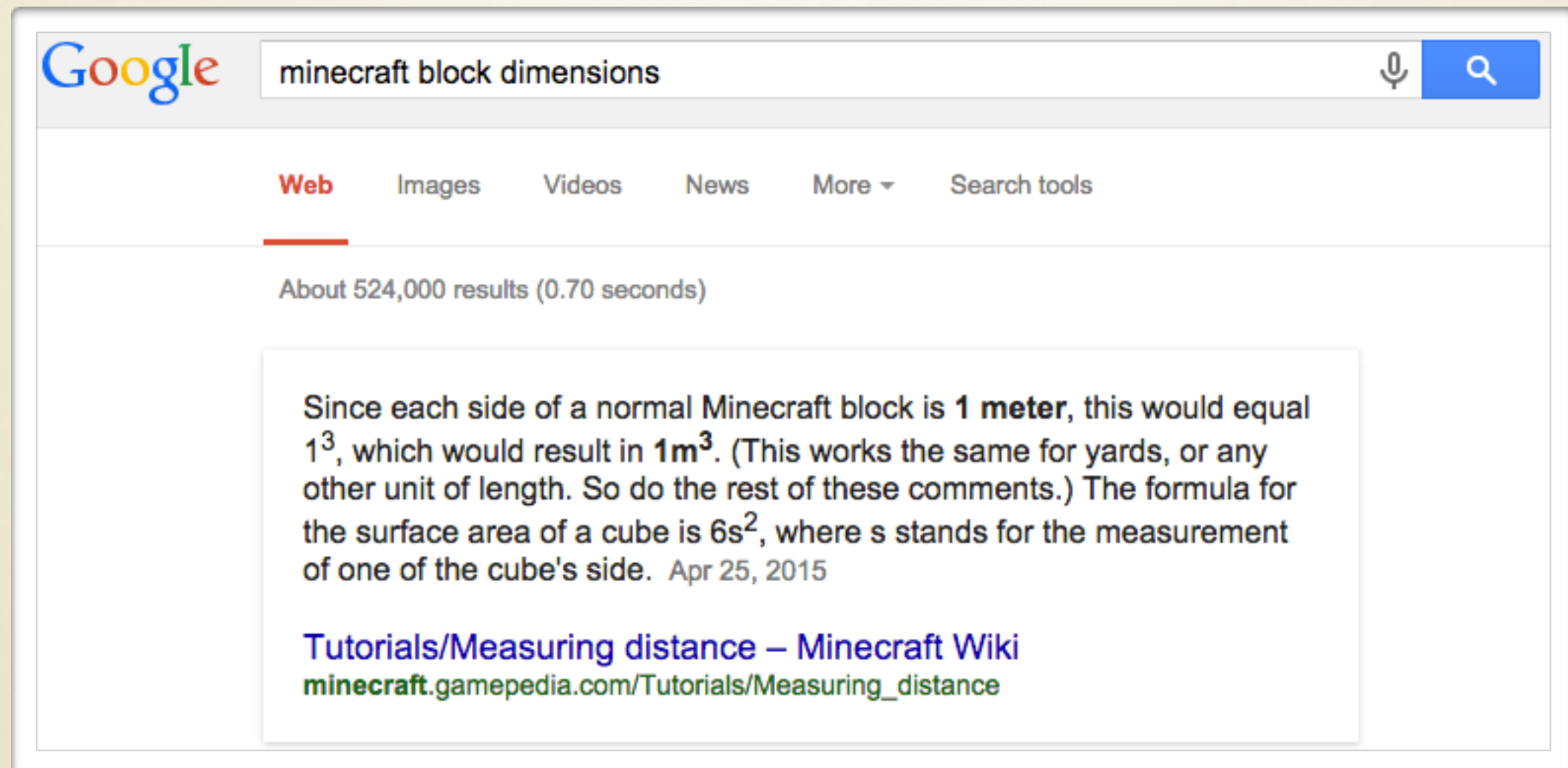
[PlayStation 4](#), [PlayStation Vita](#), [more](#)

Platforms: Android, PlayStation 3,

[Videogame](#), [more](#)

Awards: Kids' Choice Award for Favorite

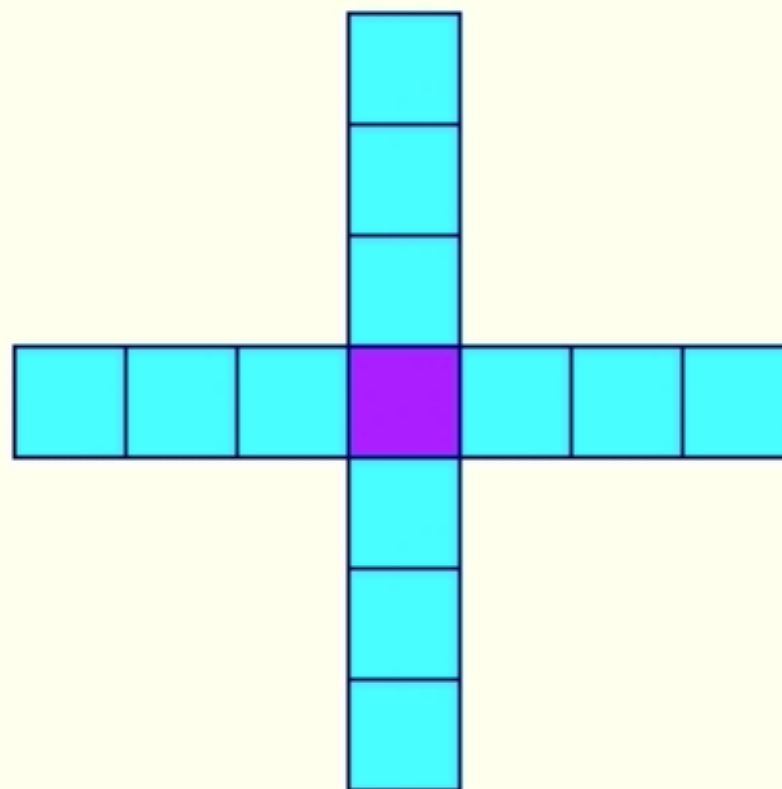
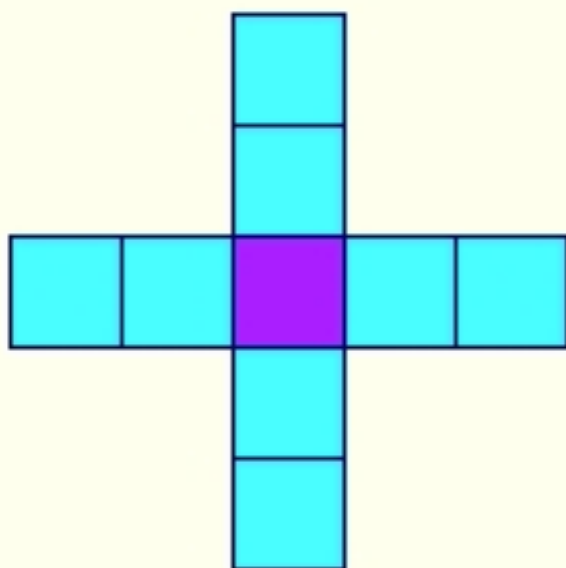
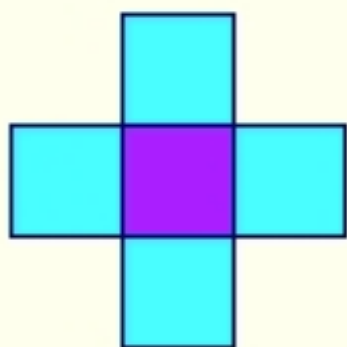
Did You Know?

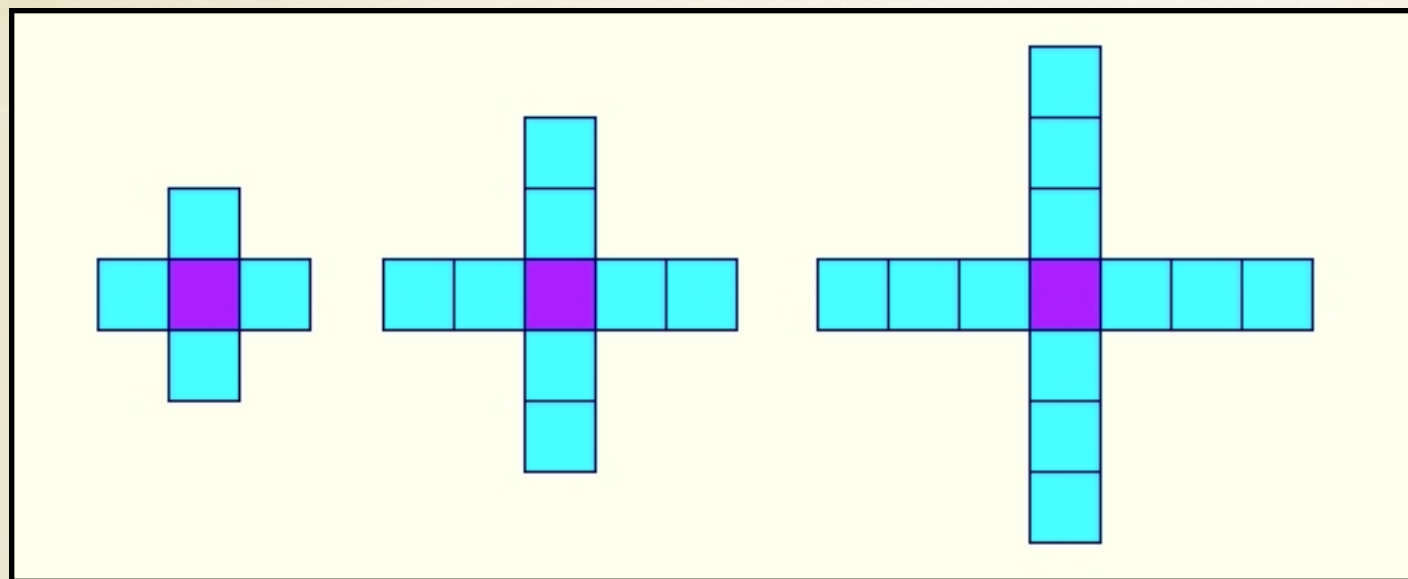


One minecraft block is a cubic metre
@mrspinall

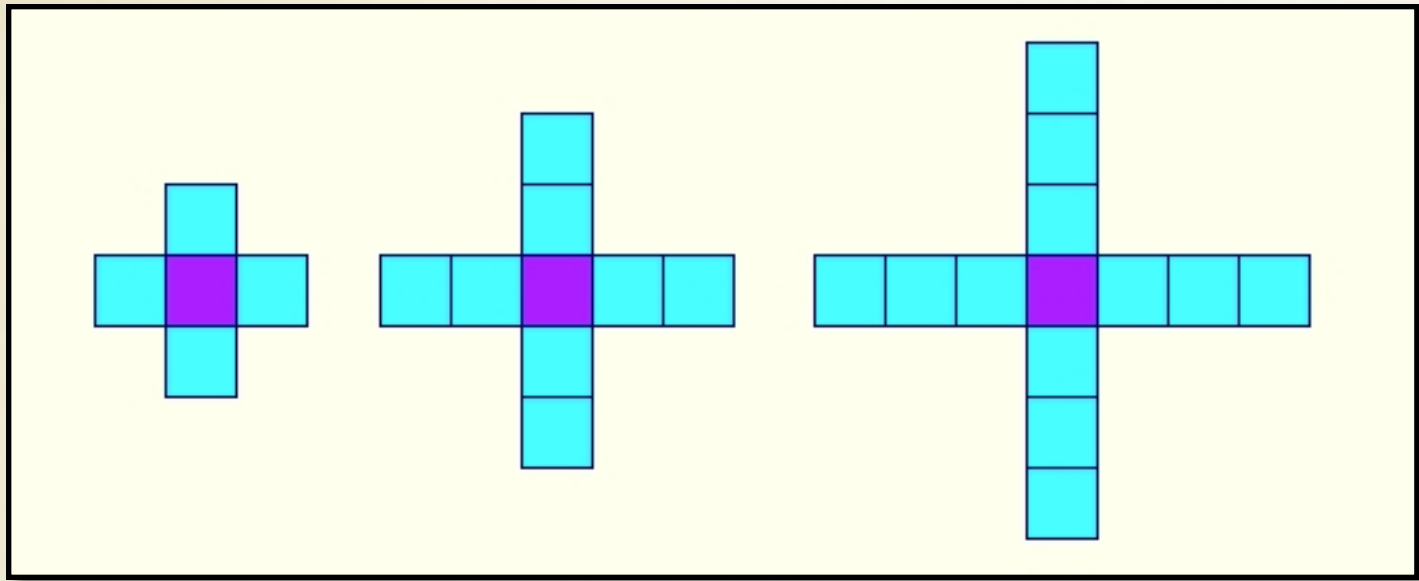
PATTERNING: EXPECTATIONS

- determine a term, given its term number, in a linear pattern that is represented by a graph or an algebraic equation;
- make connections between solving equations and determining the term number in a pattern, using the general term (e.g., for the pattern with the general term $2n + 1$, solving the equation $2n + 1 = 17$ tells you the term number when the term is 17);
- solve and verify linear equations involving a one-variable term and having solutions that are integers, by using inspection, guess and check, and a “balance” model (Sample problem: What is the value of the variable in the equation $30x - 5 = 10$?).



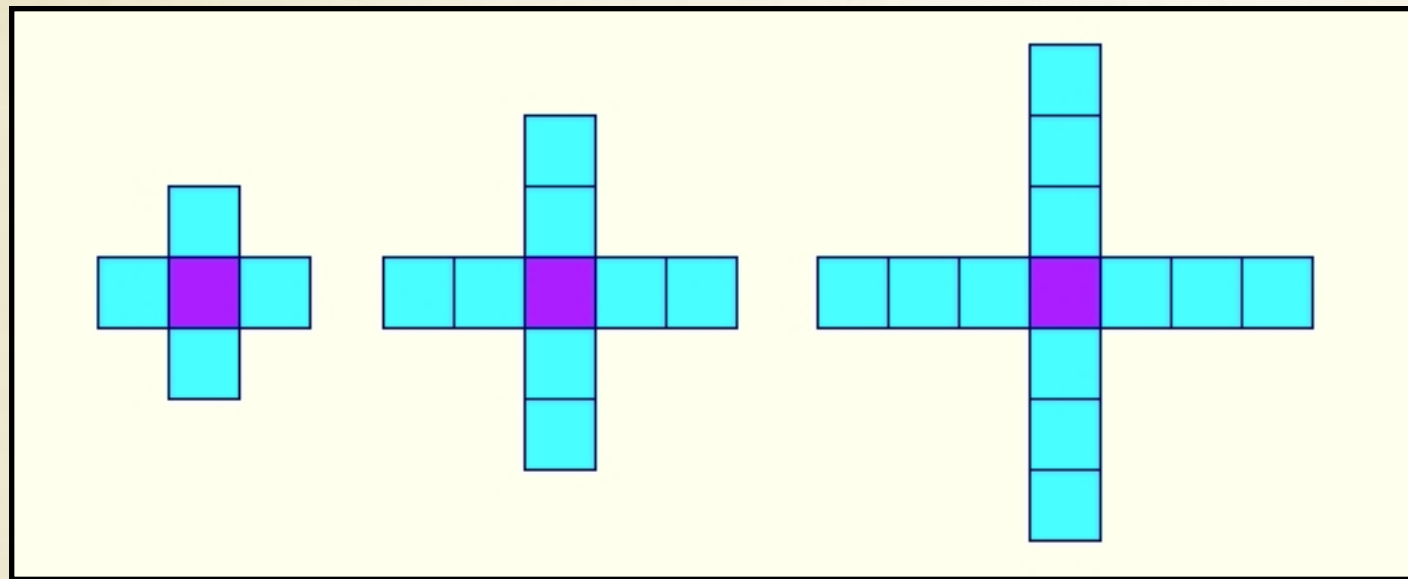


Term #	Term Value
1	5
2	9
3	13



Term #	Term Value
1	5
2	9
3	13

Term #	Term Value	Term Value
1	4	1
2	8	1
3	12	1



Term #	Term Value
1	5
2	9
3	13

Term #	Term Value	Term Value
1	4	1
2	8	1
3	12	1

Pattern Rule: $4n + 1$

BUZZWORDS

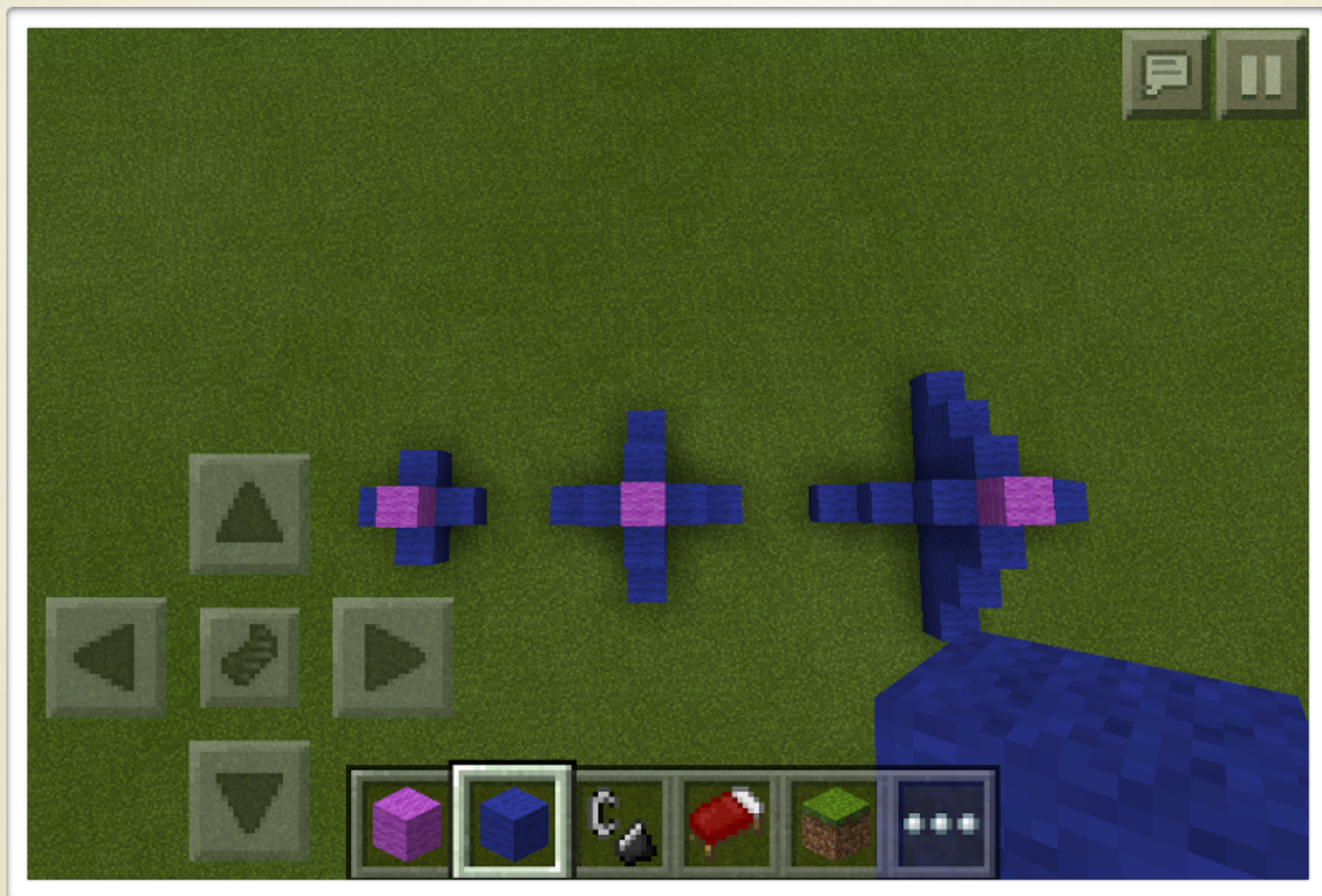
- Character Education— honesty, self-regulation and responsibility, perseverance, empathy for contributing to the safety and benefit of others, self-confidence, personal health and well-being, career and life skills.
- Citizenship — global knowledge, sensitivity to and respect for other cultures, active involvement in addressing issues of human and environmental sustainability.
- Communication — communicate effectively orally, in writing and with a variety of digital tools; listening skills.
- Critical thinking and problem solving — think critically to design and manage projects, solve problems, make effective decisions using a variety of digital tools and resources.
- Collaboration — work in teams, learn from and contribute to the learning of others, social networking skills, empathy in working with diverse others.
- Creativity and Imagination — economic and social entrepreneurialism, considering and pursuing novel ideas, and leadership for action.

COMPUTATIONAL THINKING & INQUIRY

- Collaborative inquiry holds potential for deep and significant change in education. Bringing educators together in inquiry sustains attention to goals over time, fosters teachers' learning and practice development, and results in gains for students.

SPATIAL AWARENESS

- Spatial awareness is the ability to be aware of oneself in space. It is an organized knowledge of objects in relation to oneself in that given space.
- Spatial awareness also involves understanding the relationship of these objects when there is a change of position.







Minecraft is a new manipulative
*@*mraspinall



Write this pattern rule in words. Then write two different algebraic expressions to describe the pattern rule.

Figure 1 Figure 2 Figure 3 Figure 4

7. Write two algebraic pattern rules for this toothpick pattern.

Figure 1 Figure 2 Figure 3

8. The following fence pattern starts with a gate and increases by one section in each consecutive figure. Write two algebraic pattern rules for this pattern.

Figure 1 Figure 2 Figure 3

9. a) Write an algebraic expression that describes the pattern rule for the number of red tiles.

Figure 1 Figure 2 Figure 3

b) Repeat part (a) for the blue tiles. Explain your thinking.

10. Use the pattern in question 9.

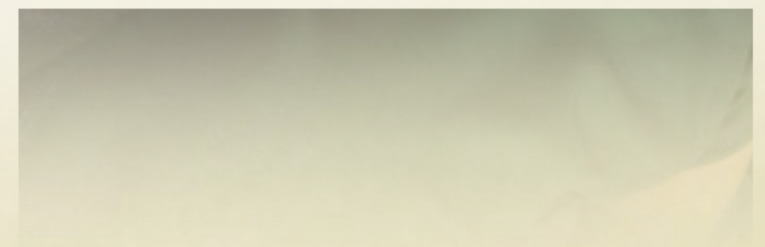
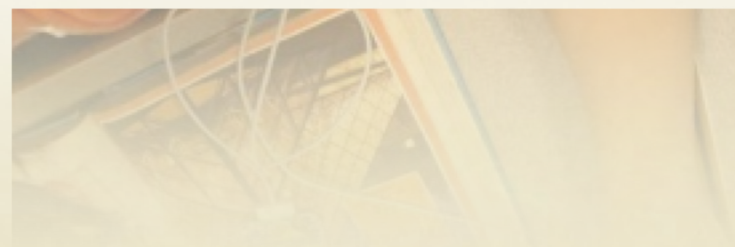
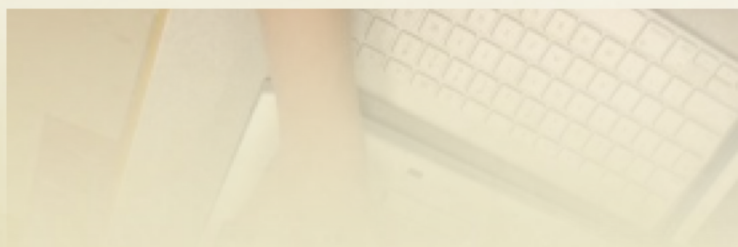
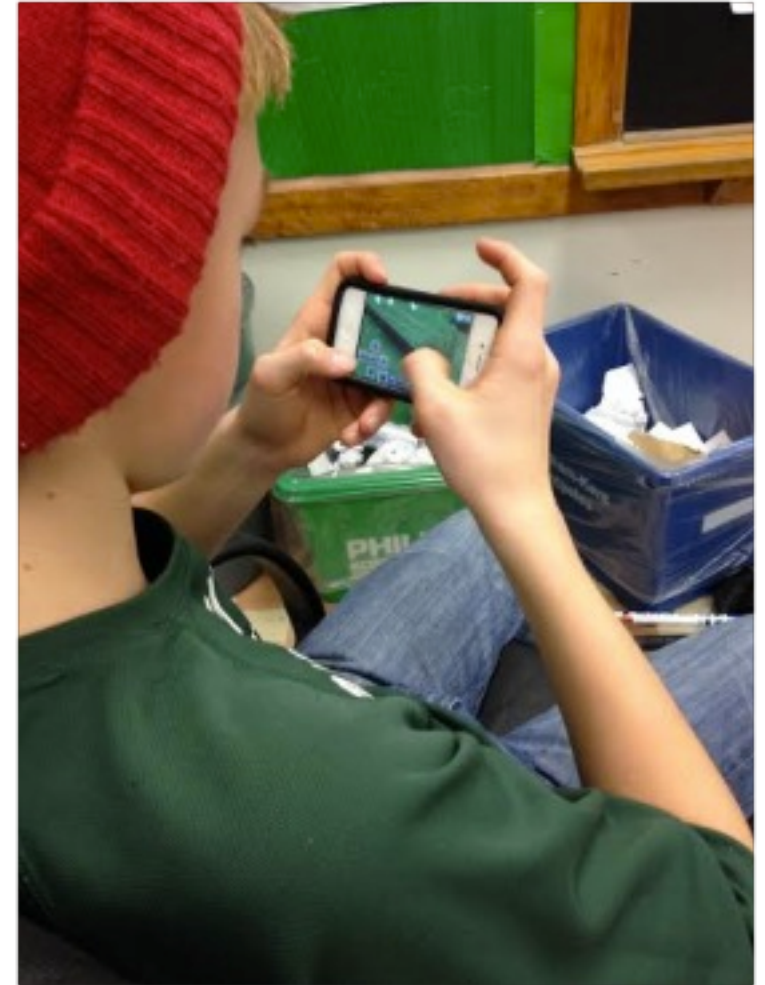
a) Can you make a figure with an odd number of blue tiles? Explain.

b) How many blue tiles would you need to make a figure that has 10 red tiles?



STUDENT LEAD PA DAY

- Flat school model
- Kids as teachers
- Minecraft Workshop





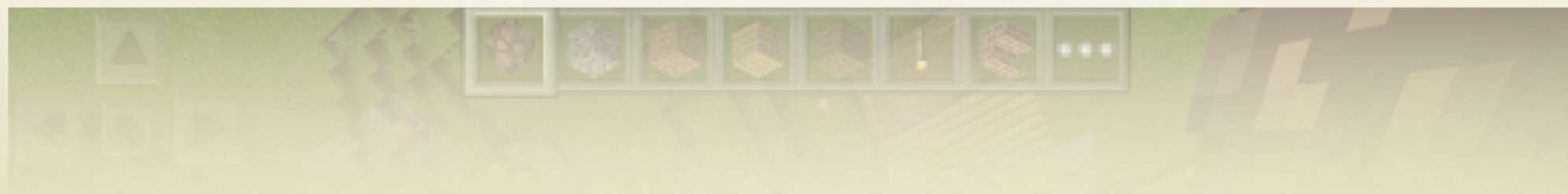
UNDERSTANDING STRUCTURES AND MECHANISMS FORM AND FUNCTION

- **Overall Expectations:**

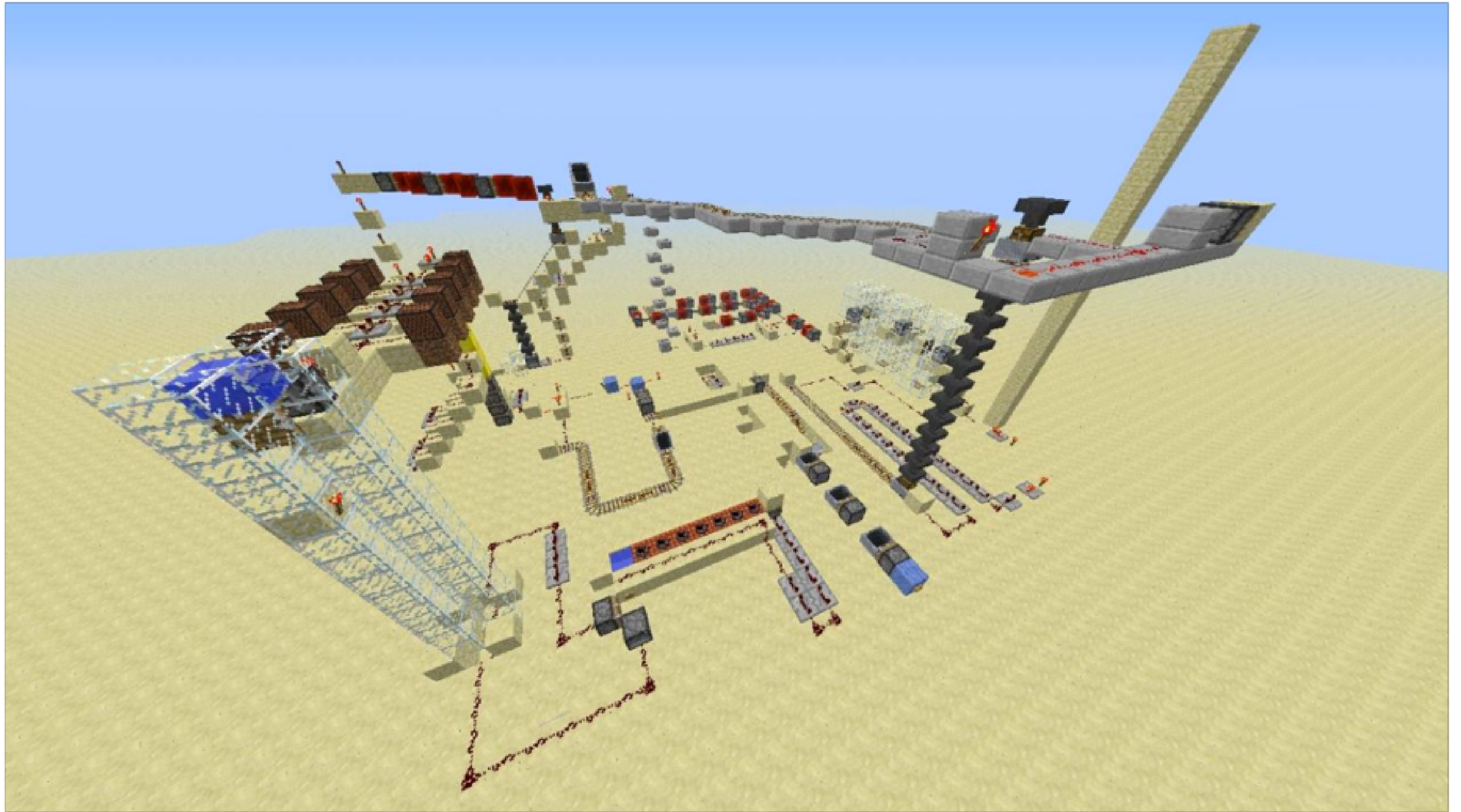
- design and construct a variety of structures, and investigate the relationship between the design and function of these structures and the forces that act on them;
- demonstrate an understanding of the relationship between structural forms and the forces that act on and within them.

- **Specific Expectations:**

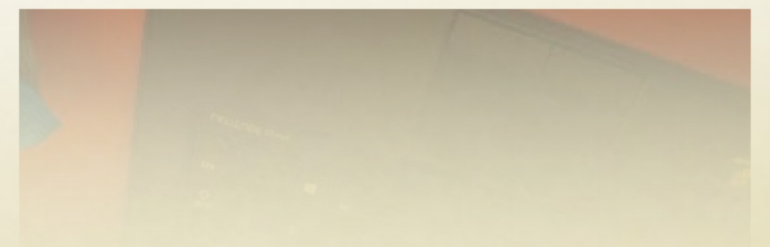
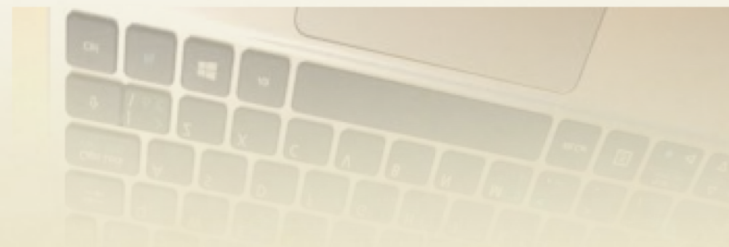
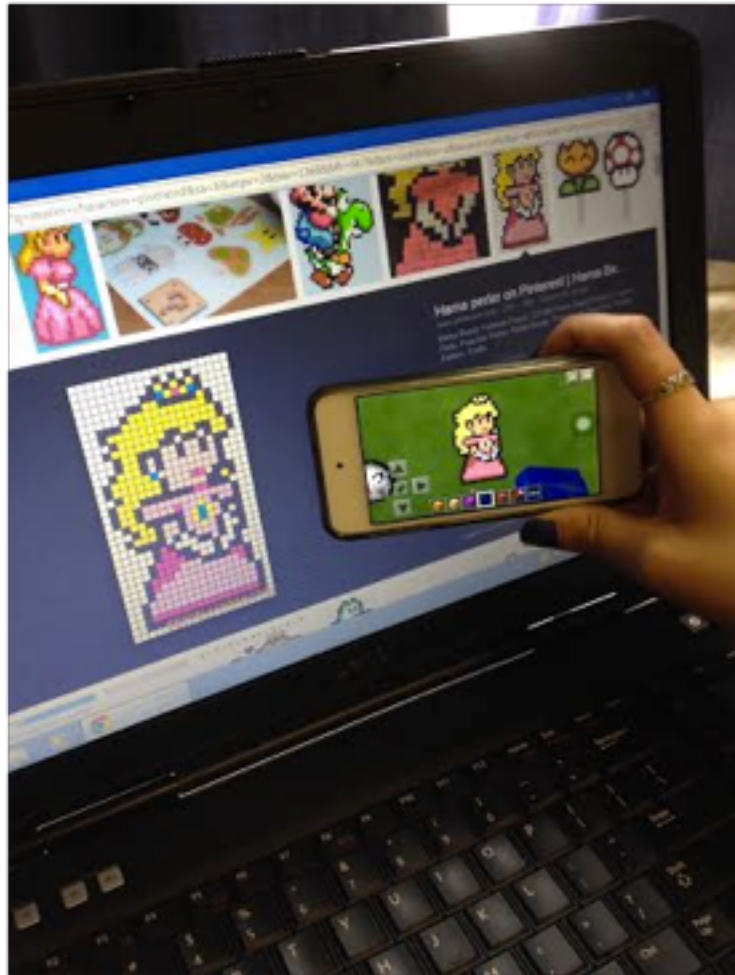
- classify structures as solid structures (e.g., dams), frame structures (e.g., goal posts), or shell structures (e.g., airplane wings);
- identify and describe factors that can cause a structure to fail (e.g., bad design, faulty construction, foundation failure, extraordinary loads);
- describe the role of symmetry in structures (e.g., aesthetic appeal, structural stability).



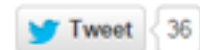
Rube Goldberg



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