



# Welcome to Math Circle

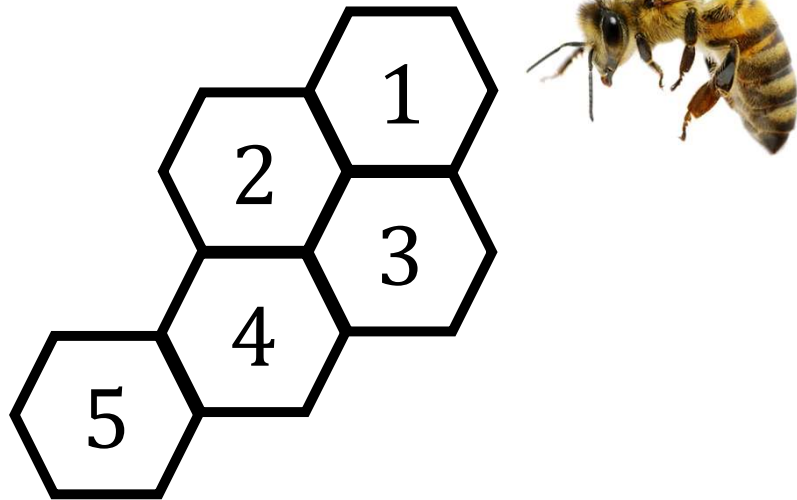
What is your favourite insect and why?

Please mute yourself and answer the question in the chat!

You Can Call Me Queen Bee

# The Setting

The Queen Bee of the beehive is very strict. She wants the honeycombs of her hive colored a specific way.

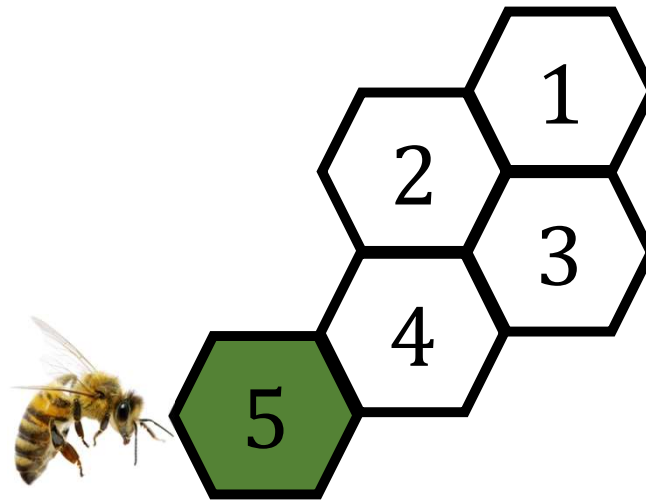


# The Color Constitution

- A honeycomb should be **green** if by starting in that honeycomb, a bee can walk through the entire beehive without repeating any honeycombs, *regardless of what path it takes.*
- A honeycomb should be **yellow** if by starting in that honeycomb, a bee *may be able to walk through the entire beehive without repeating a honeycomb, OR it may get stuck along the way, depending on the path.*
- A honeycomb should be **red** if by starting in that honeycomb, a bee can *never* walk through the entire beehive without repeating any honeycombs, *regardless of what path it takes.*

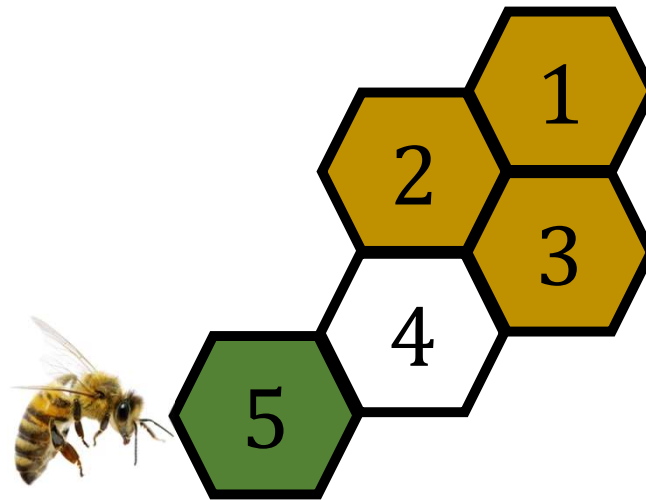
# Article I

- A honeycomb should be **green** if by starting in that honeycomb, a bee can walk through the entire beehive without repeating any honeycombs, *regardless of what path it takes.*



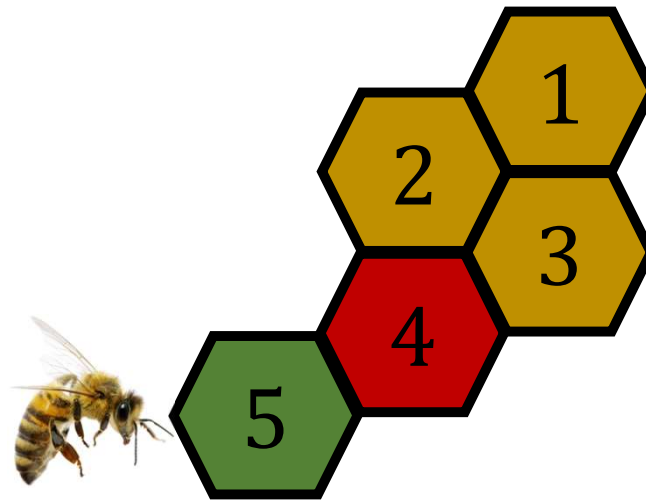
# Article II

- A honeycomb should be **yellow** if by starting in that honeycomb, a bee *may* be able to walk through the entire beehive without repeating a honeycomb, or it *may get stuck along the way, depending on the path*.



# Article III

- A honeycomb should be **red** if by starting in that honeycomb, a bee can *never* walk through the entire beehive without repeating any honeycombs, *regardless of what path it takes*.

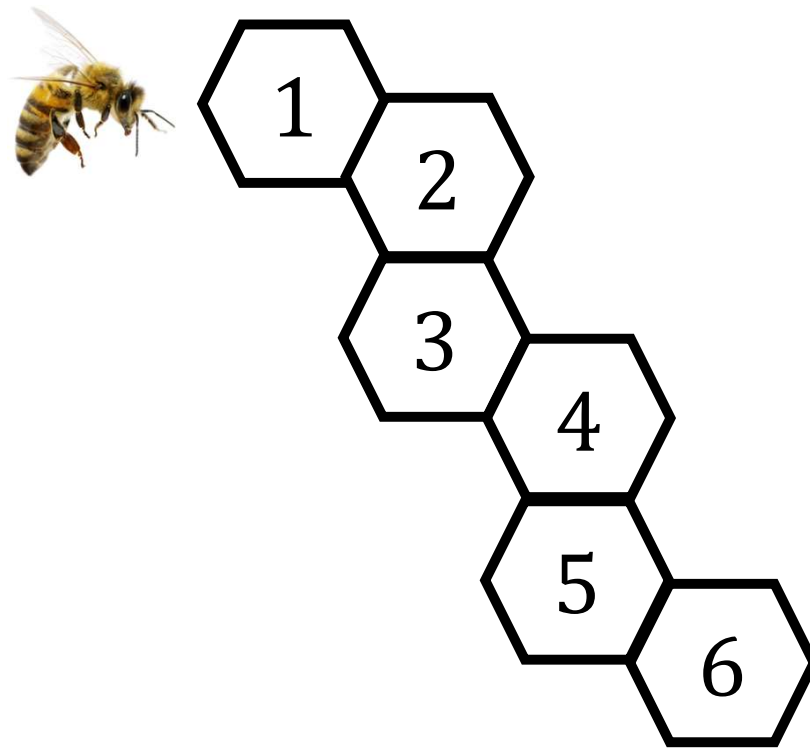




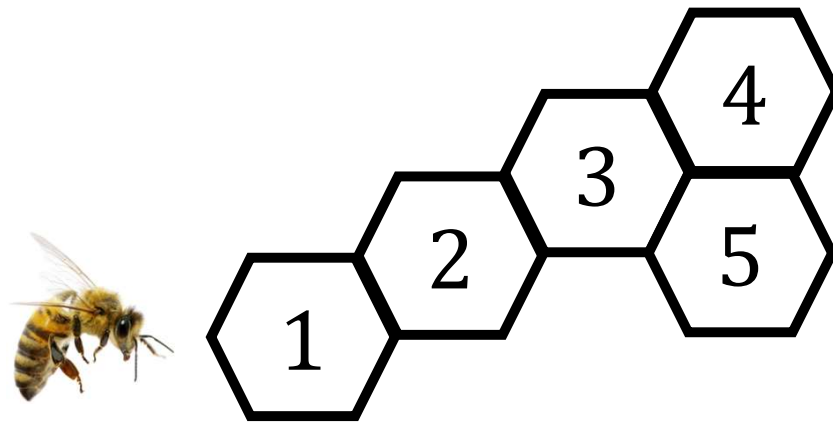
# Breakout Rooms



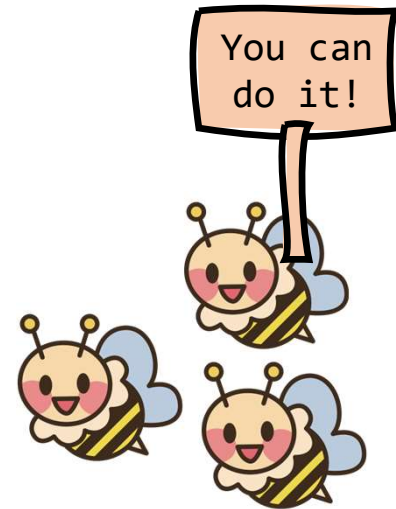
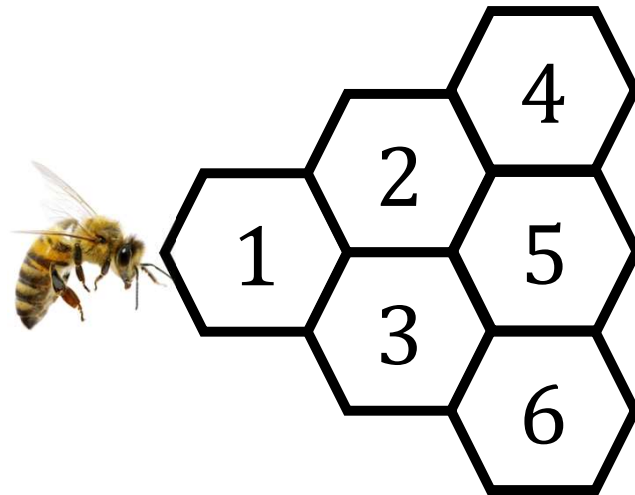
# Example 1



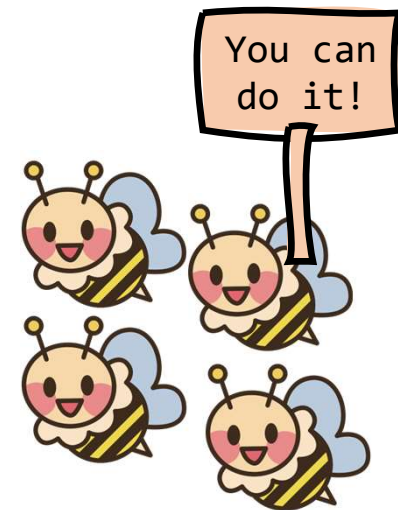
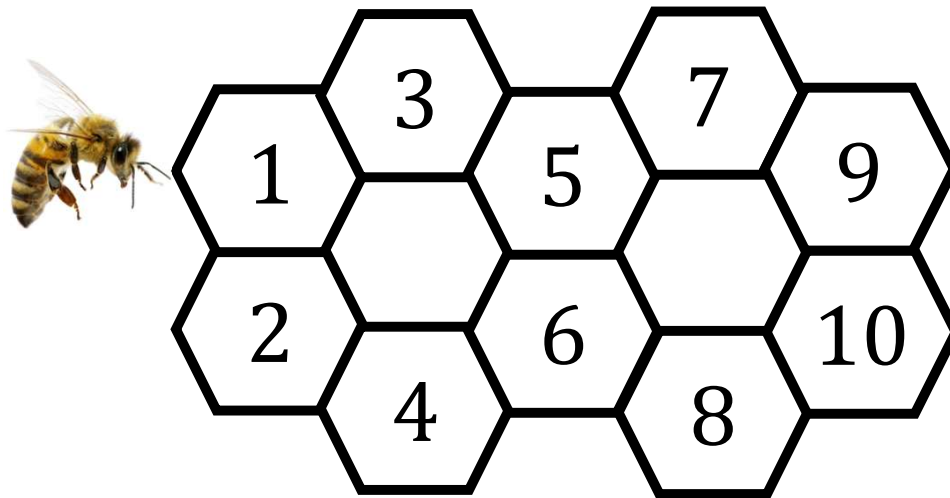
# Example 2



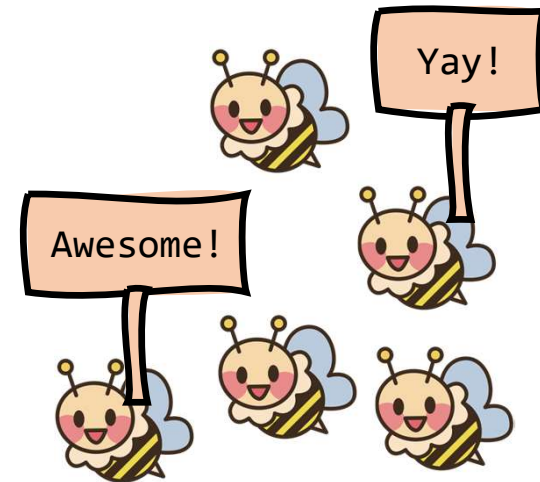
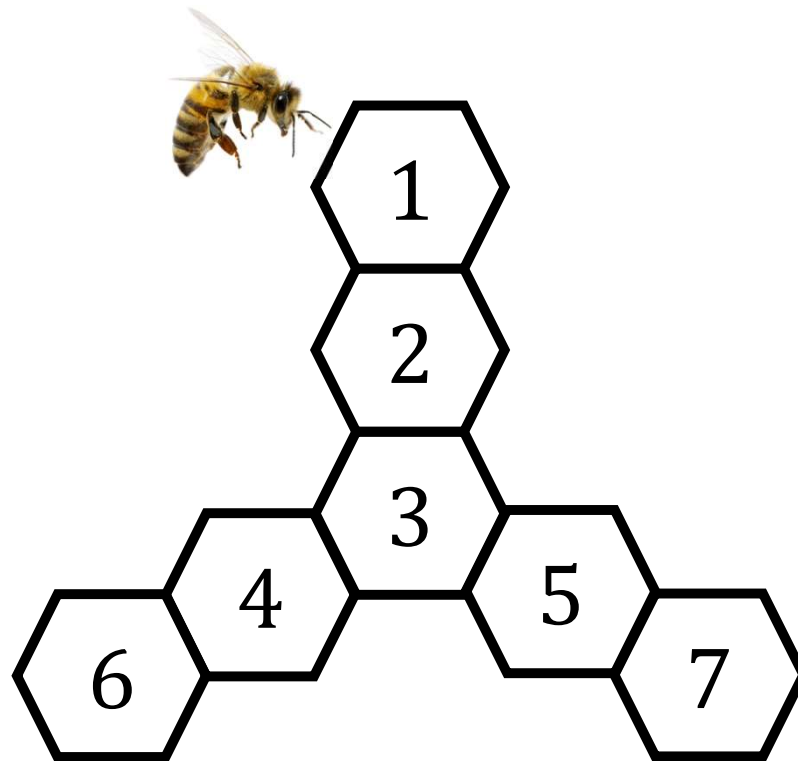
# Example 3



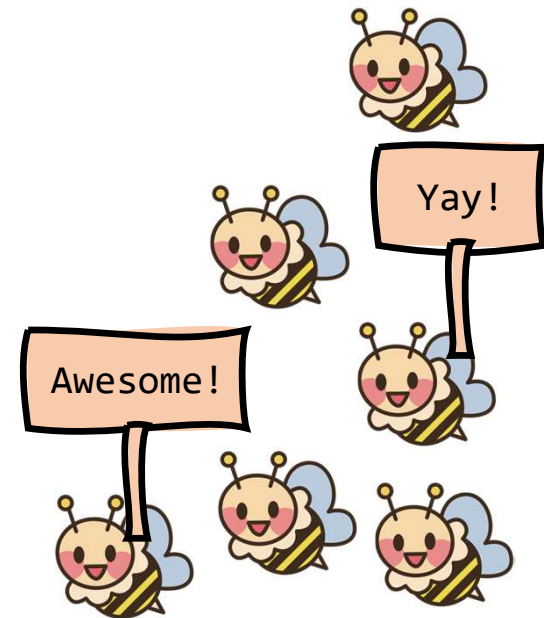
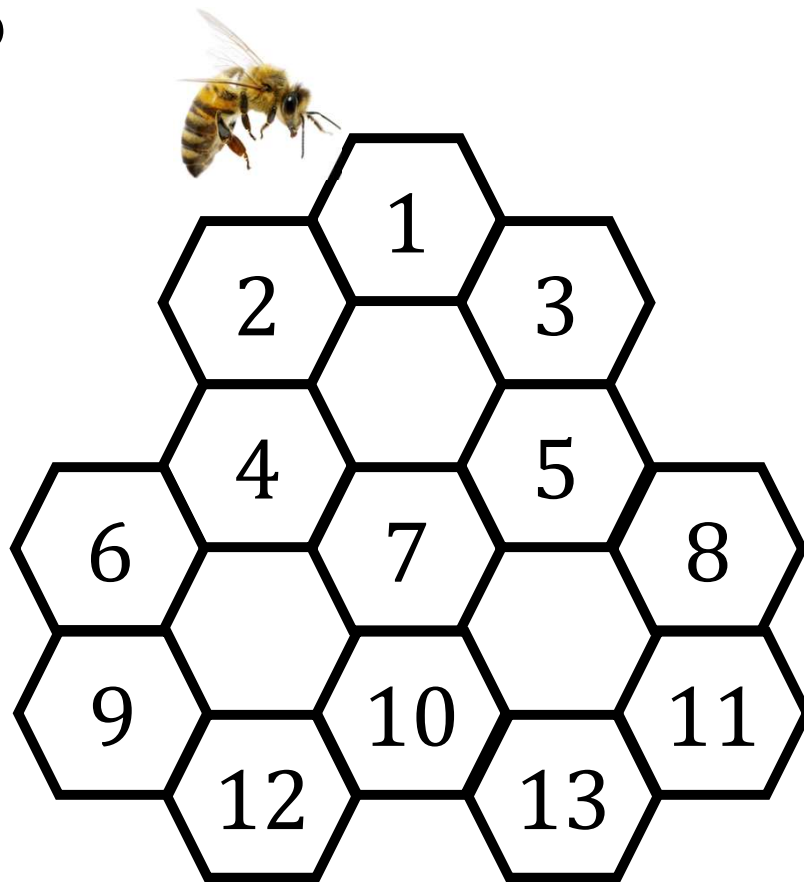
# Example 4



# Example 5



# Example 6



# Bonus Example 7

