

Professional Learning – Coding Series



Land Acknowledgement

Anishinaabe Territory

Robinson-Huron Treaty

**Located on the traditional lands of
Atikameksheng Anishnawbek**



schools.sciencenorth.ca/virtual-learning-packages

VIRTUAL LEARNING PACKAGES

VIRTUAL LEARNING

**SMALL SCHOOL
PACKAGE**

**MEDIUM SCHOOL
PACKAGE**

**LARGE SCHOOL
PACKAGE**

**SYNCHRONOUS E-
WORKSHOPS**

Science North is pleased to offer Ontario schools virtual learning packages. We understand that experiential learning is of utmost importance for students and with new guidelines and field trip restrictions in place, why not go virtual?! Purchasing a virtual learning package for your school means that all students in the school will have the opportunity to participate in dynamic live shows, engaging synchronous workshops, and be able to drive their own experience by asking our Scientists anything!

**Let Science North support your
curriculum with our
customizable packages.**

JUST FOR TEACHERS

TEACHERS

TEACHERS WORKSHOPS

EDUCATOR RESOURCES

SCIENCE AT HOME

TEACHERS ACCESS PASS

SUBSCRIBE TO SCIENCE-
ATIONAL NEWS!

TEACHERS WORKSHOPS

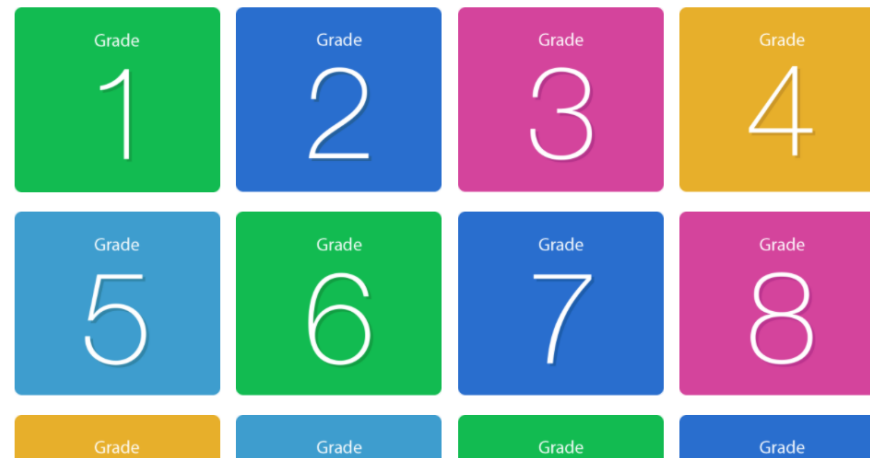


Science North has developed a series of dynamic teacher workshops that will bring the Ontario Science and Technology Curriculum to life. Each workshop is designed to give teachers the confidence and resources they need to investigate and explore the scientific concepts involved. These workshops involve teachers in fun, hands-on activities that are easily reproduced for the classroom at little or no cost.

COVID UPDATE

[schools.sciencenorth
.ca/just-teachers](https://schools.sciencenorth.ca/just-teachers)

education.sciencenorth.ca



Workshop Goals

Science North is dedicated to getting **students excited** and **thinking about science**. We aim to provide teachers with **innovative, hands-on activities** and **creative learning tools** that make learning more meaningful and fun.

Motivate students:

- *Connect to their interests.*
- *Highlight relevance of material.*
- *Use real-world examples.*
- *Choose challenging activities.*
- *Boost confidence.*

Promote active learning:

- *Use a group or individual activity.*
- *Challenge them to solve a problem.*

Patterns in Nature – Gr 1/2

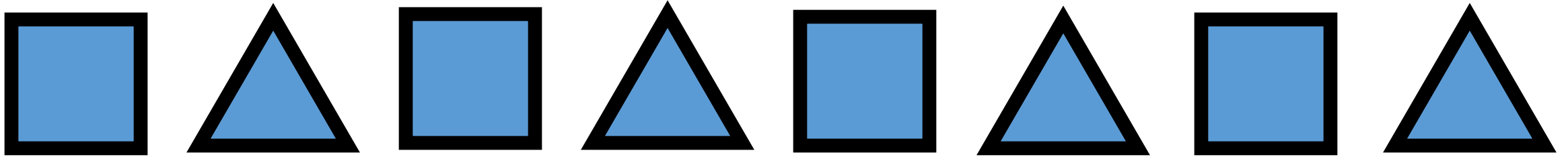
Part 1 - November 16, 2020

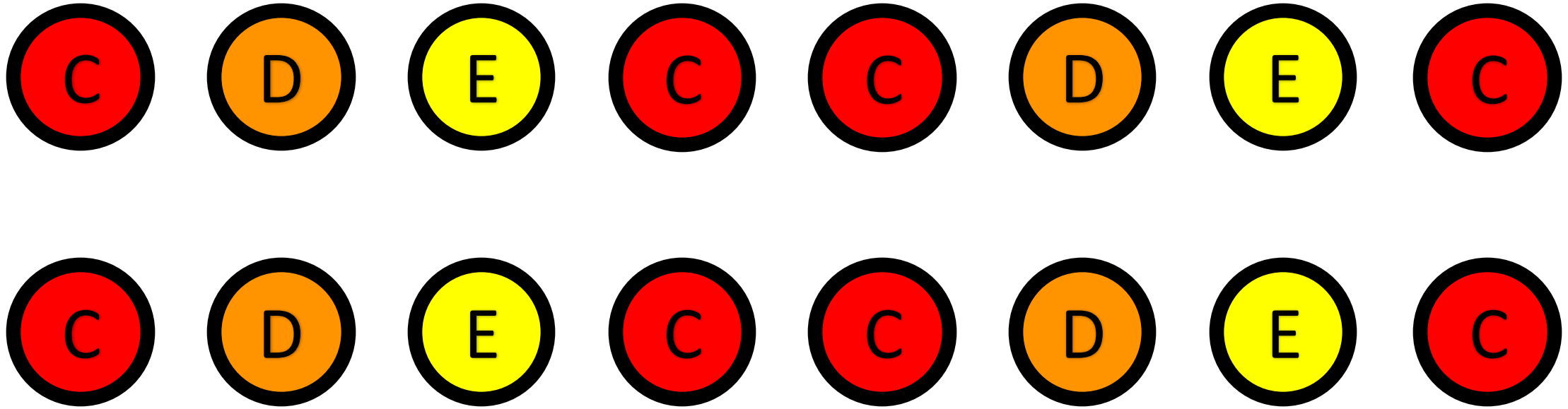
- Offline Activity
 - Lesson Plan
 - Slides
- Coding Activity
 - Lesson Plan
 - Conditional Statement Handout
 - Slides

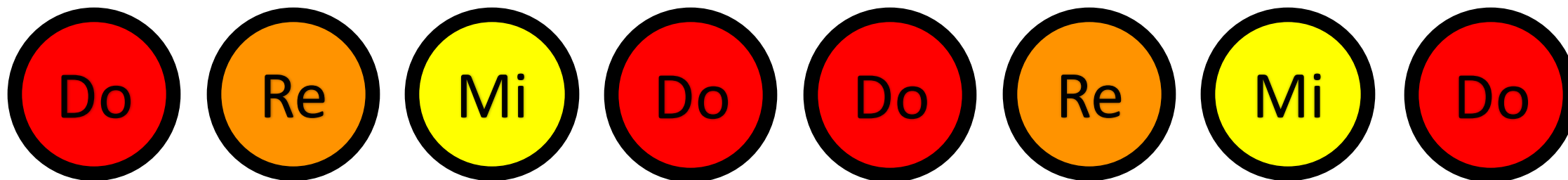
Part 2 - November 17, 2020

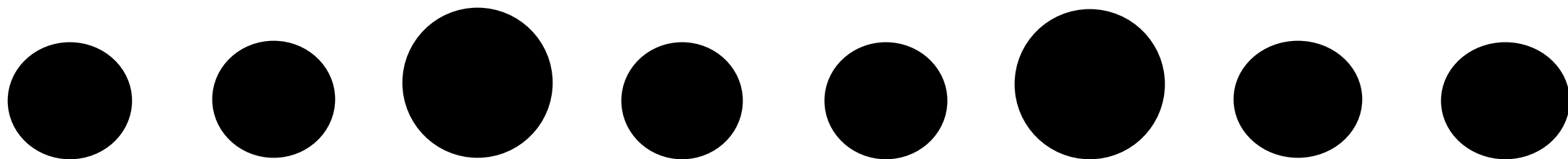
- Math Activity
 - Lesson Plan
 - Coding Handout
 - Ideas Handout
 - ScratchJr

Patterns are codes!









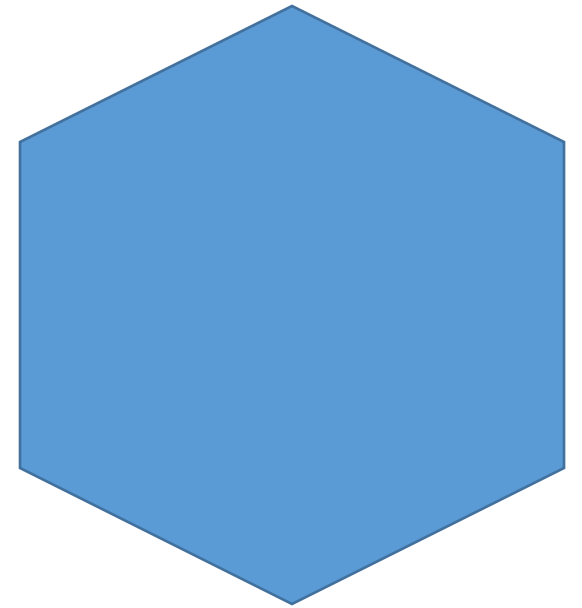
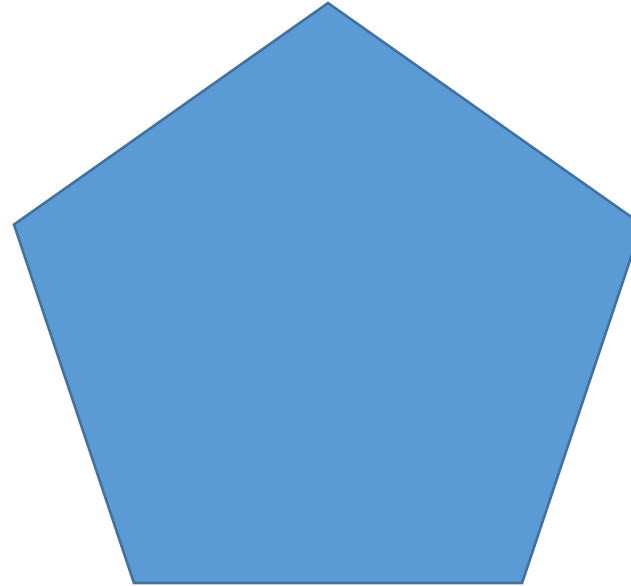
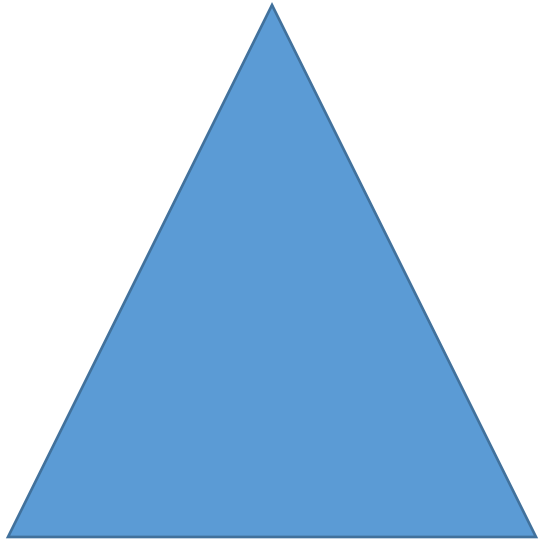
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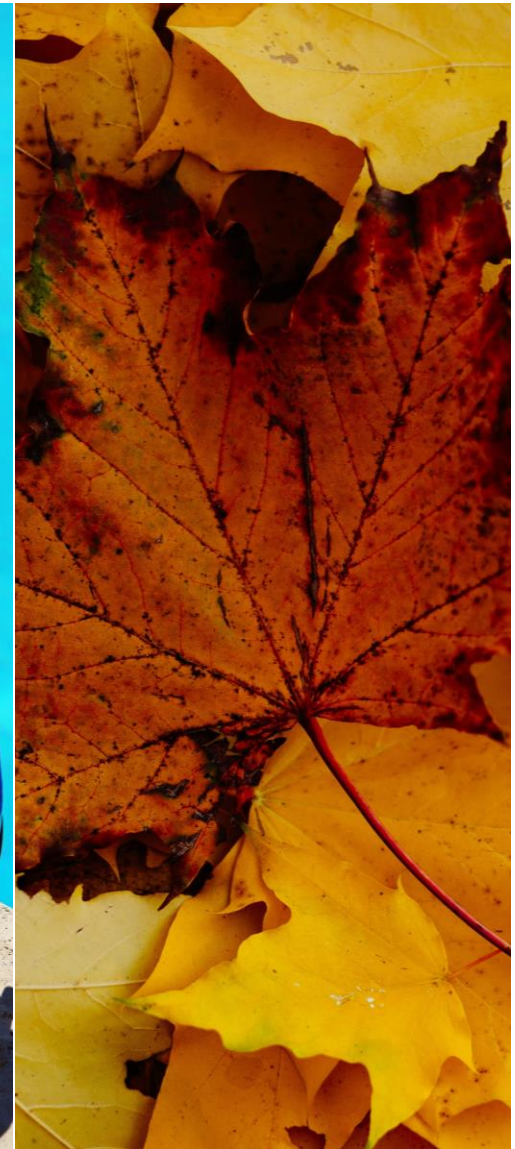
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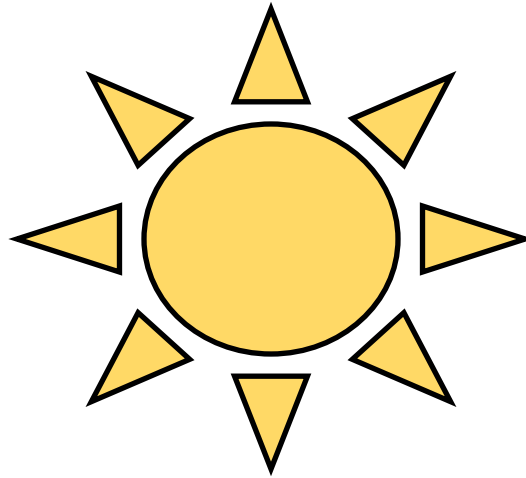
What comes next?







Spring

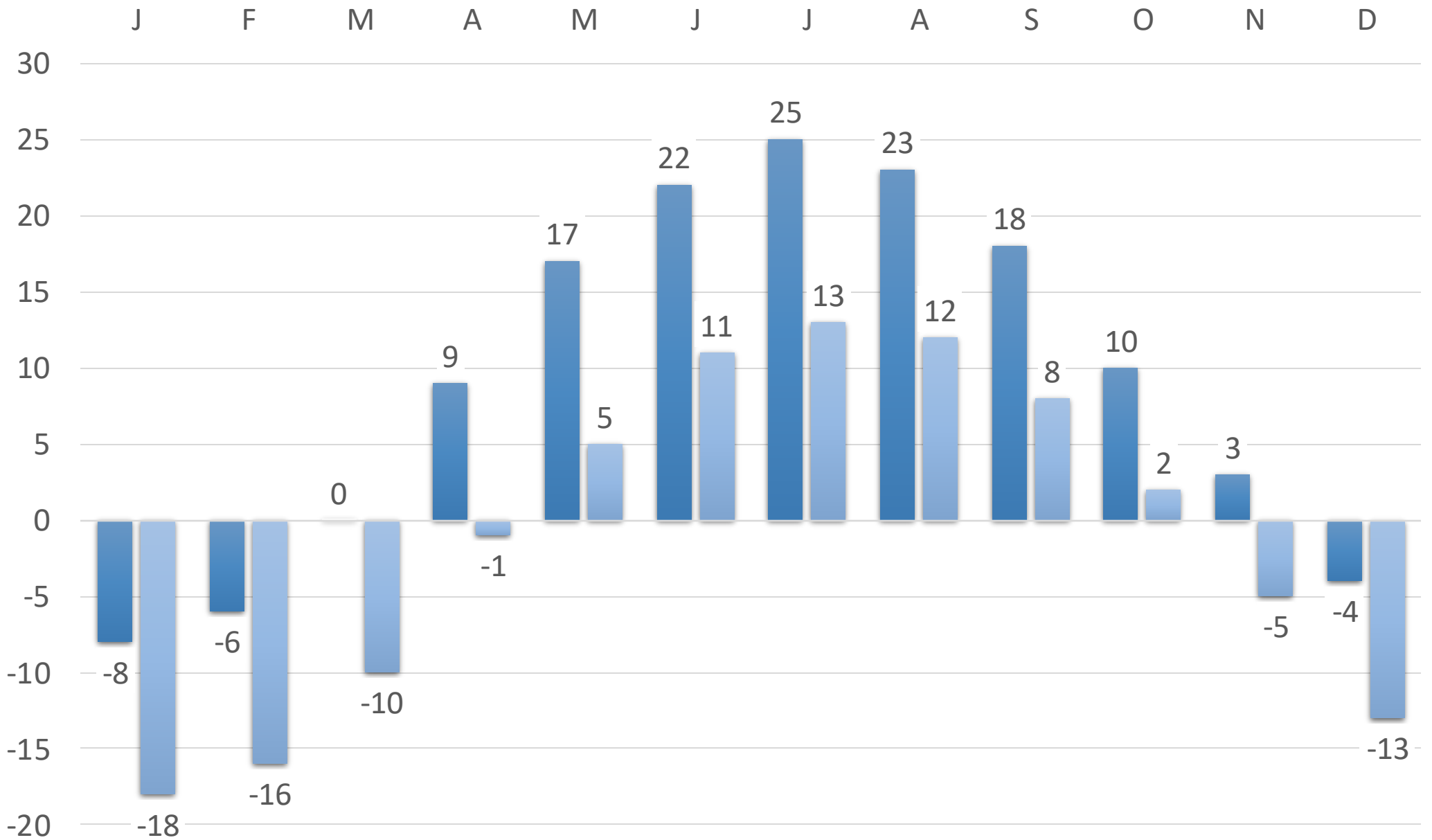
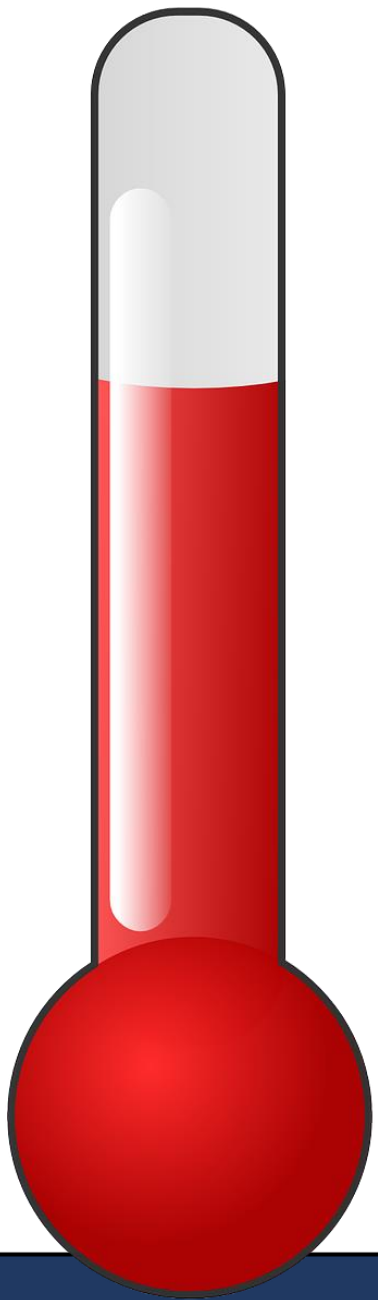


Summer

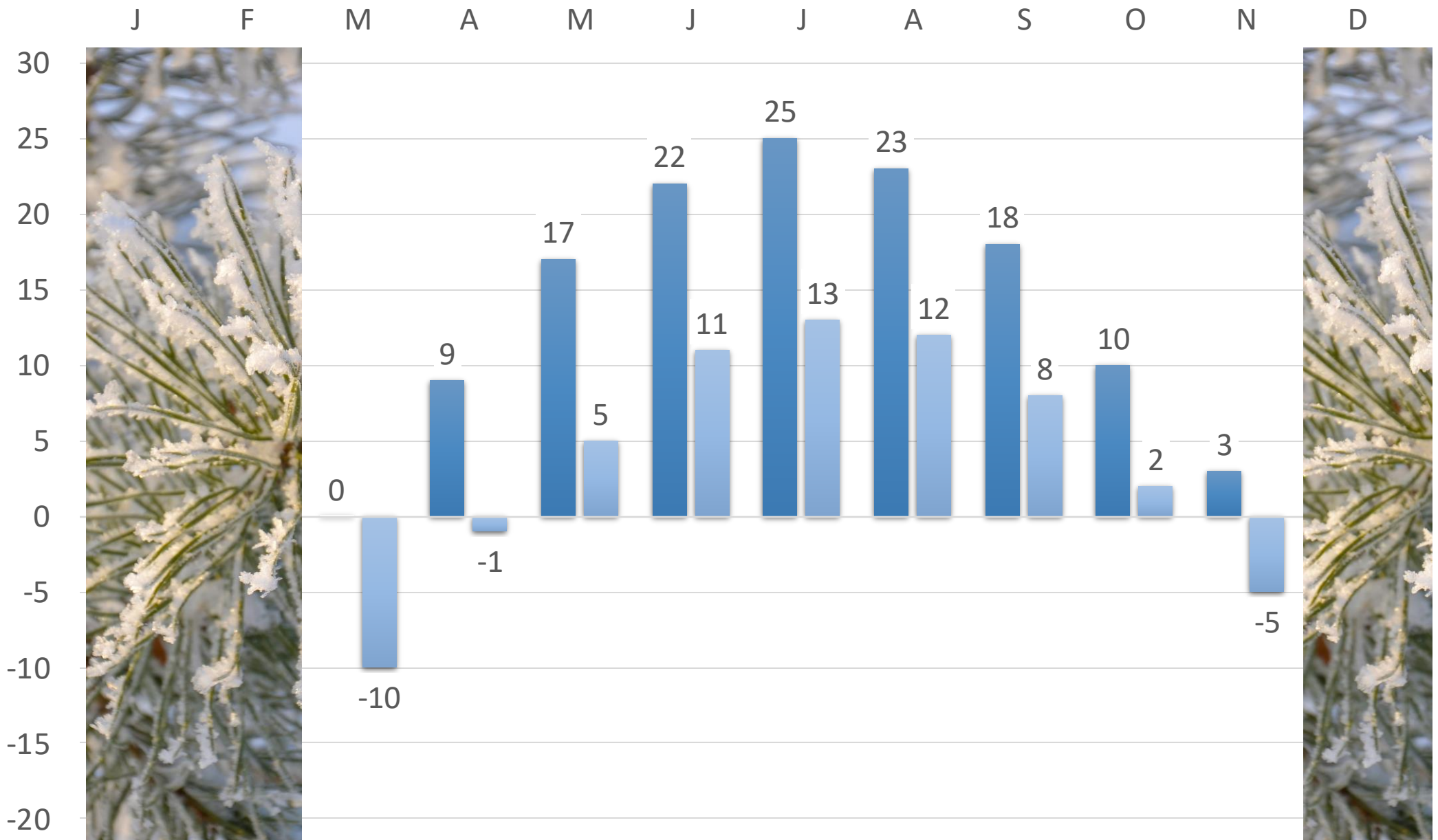
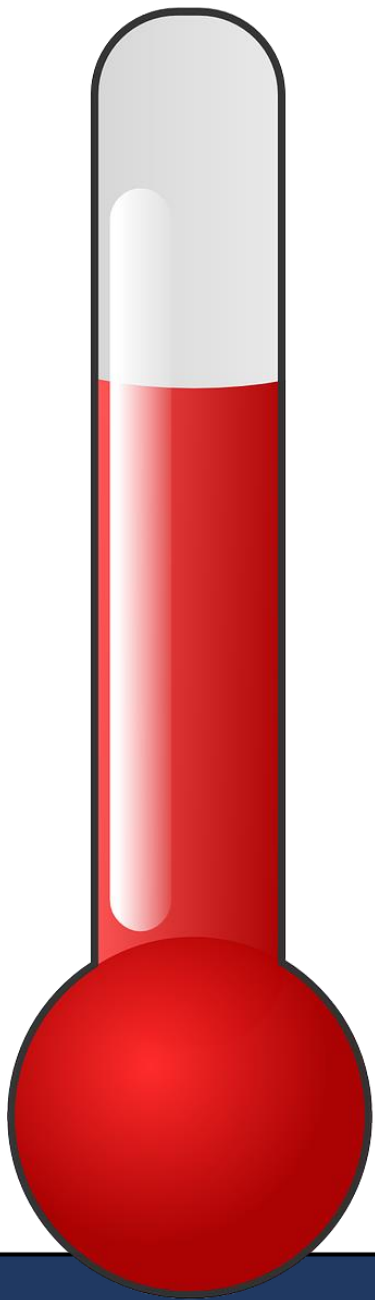
Winter



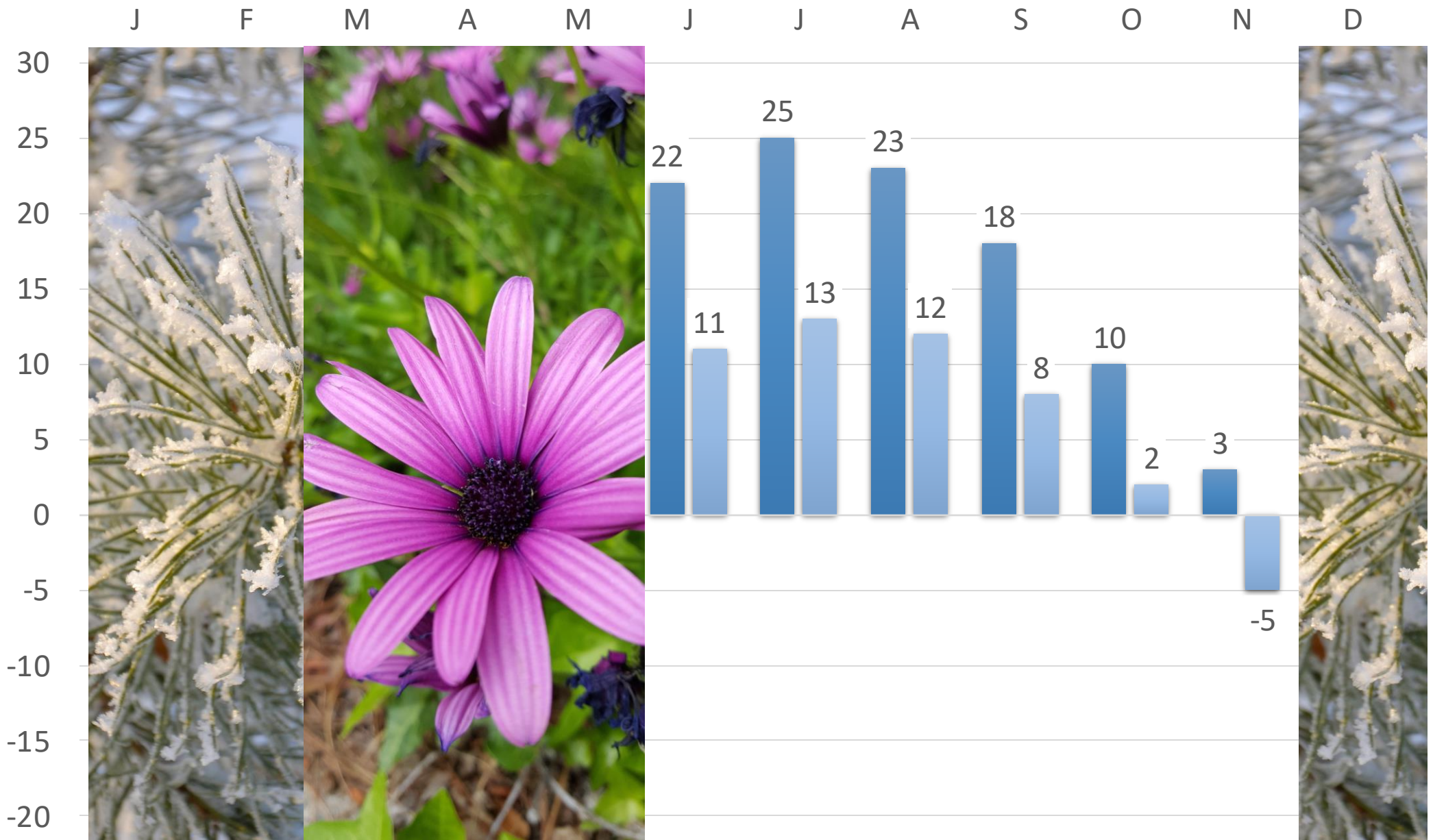
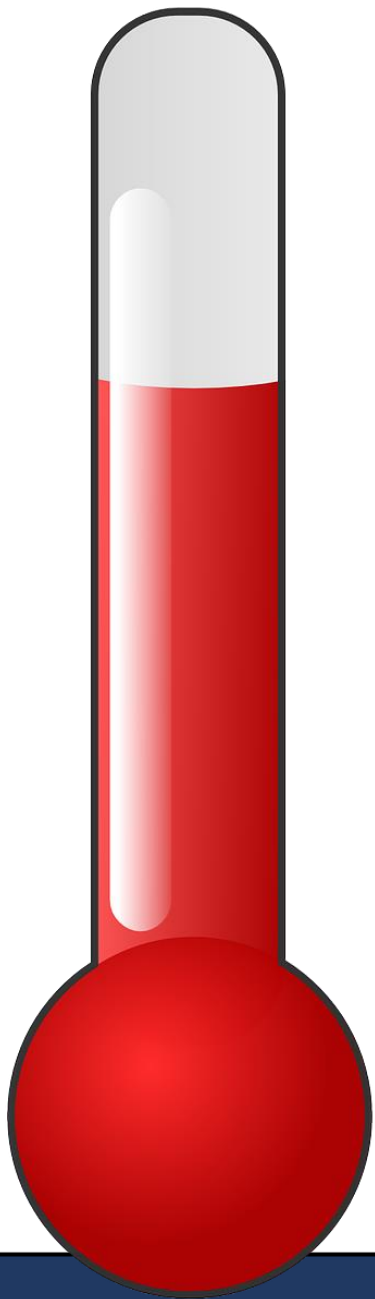
Fall



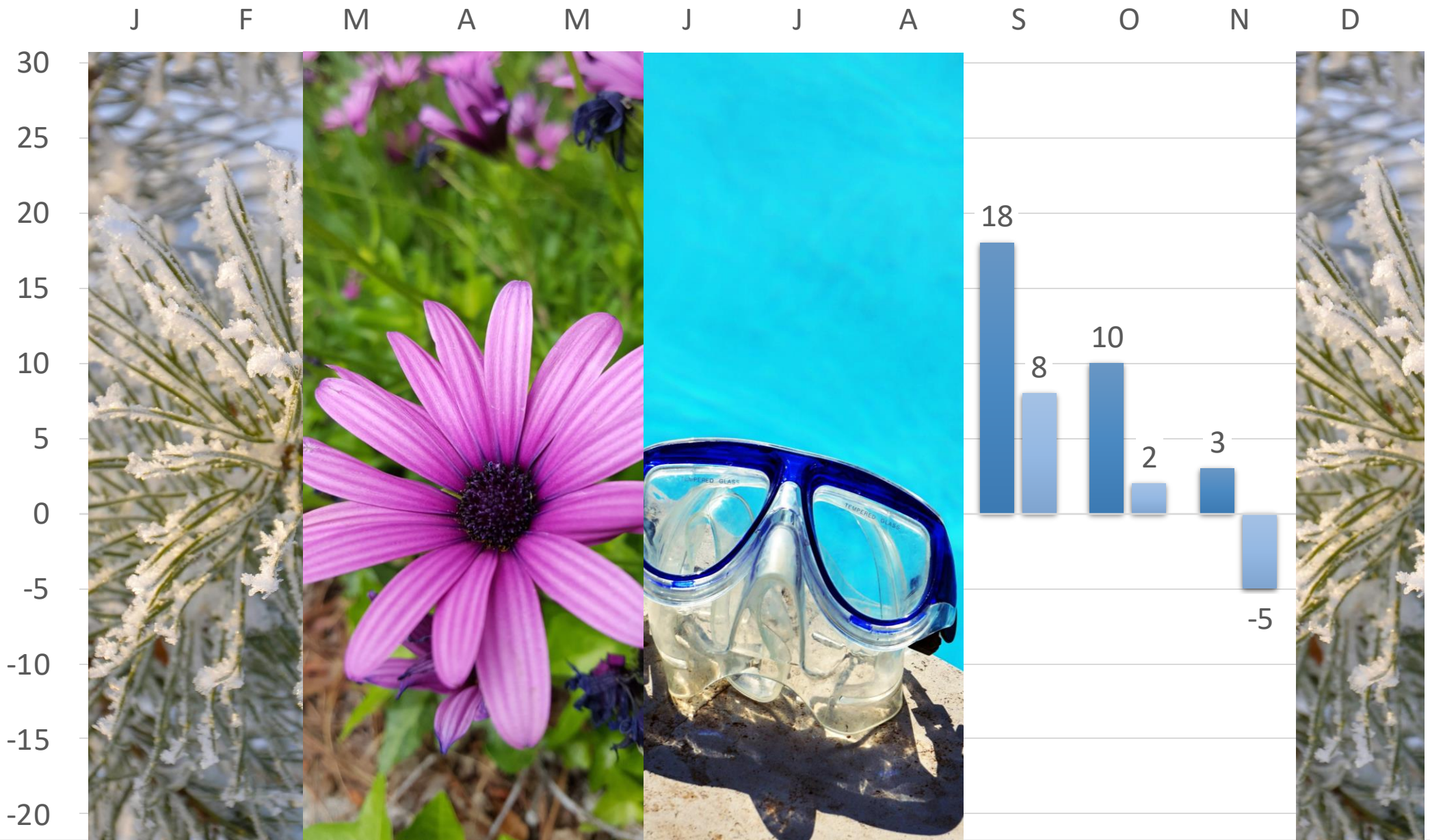
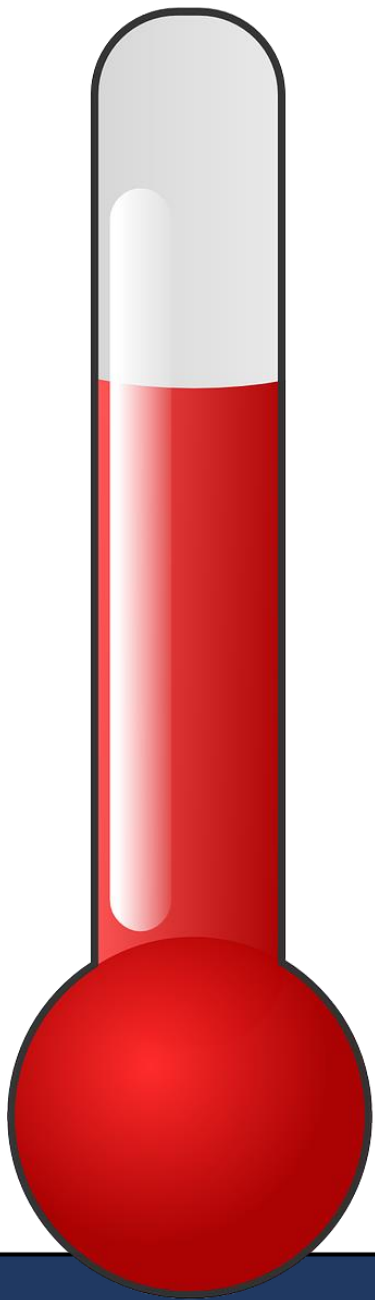
-25



-25



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J

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M

A

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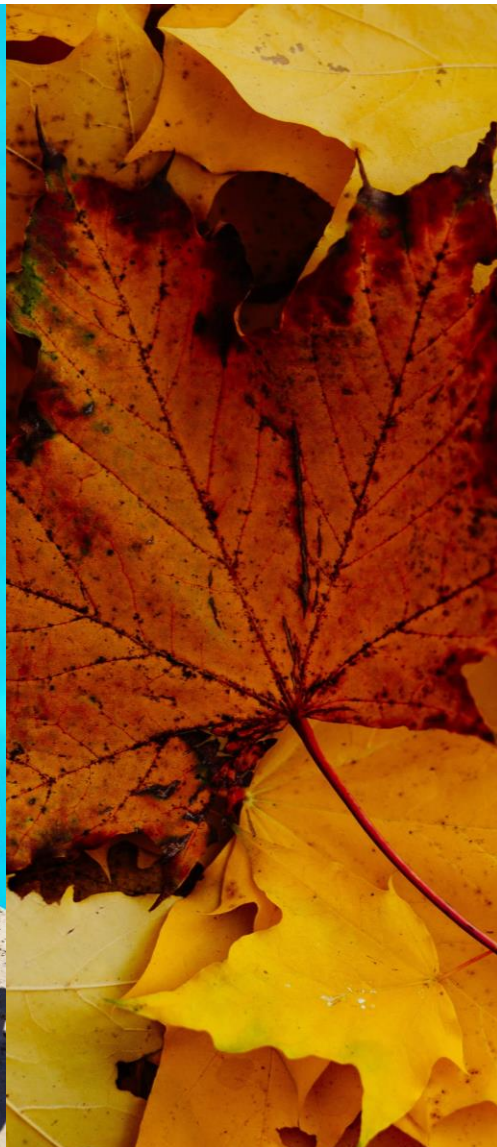
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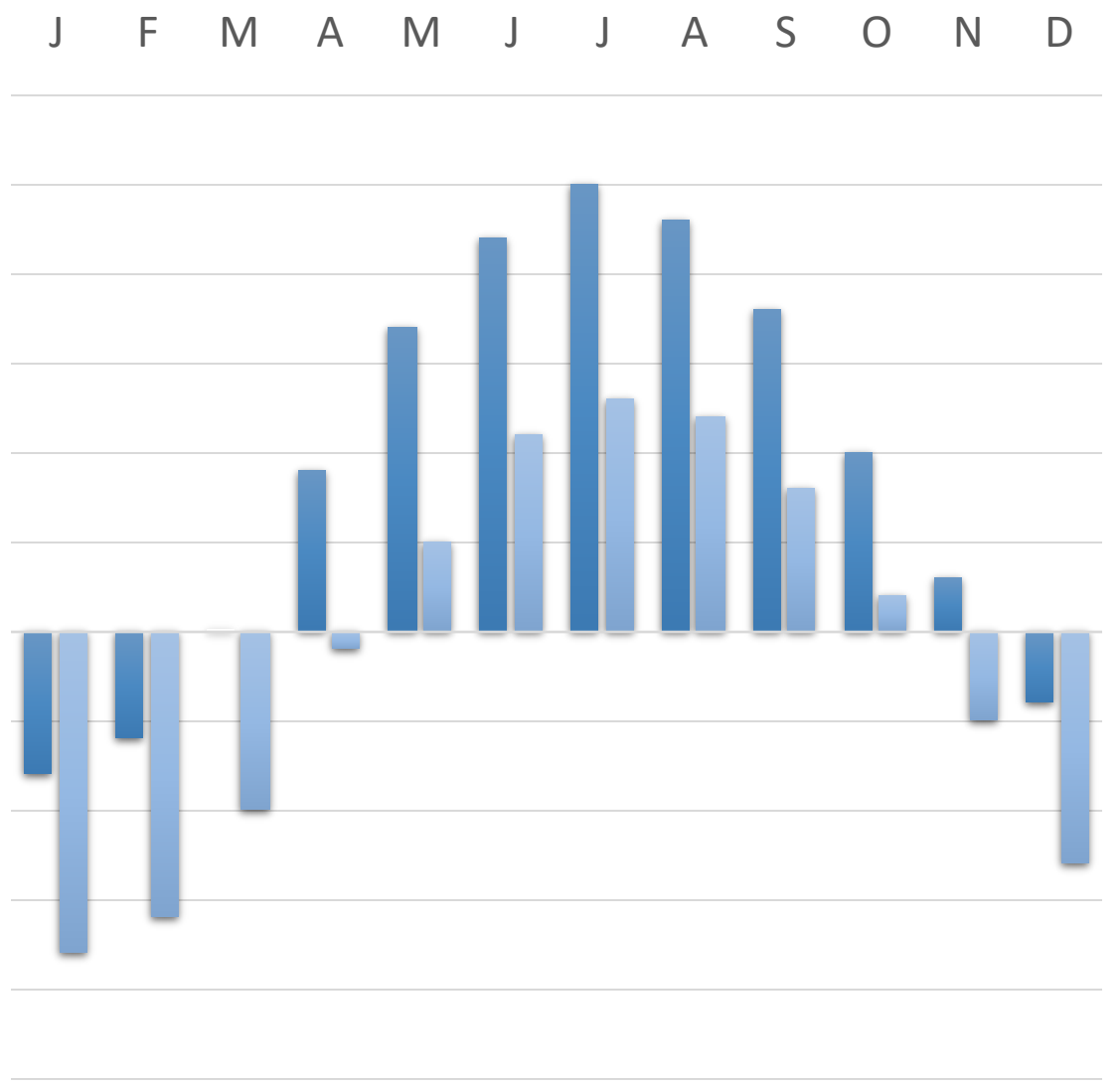
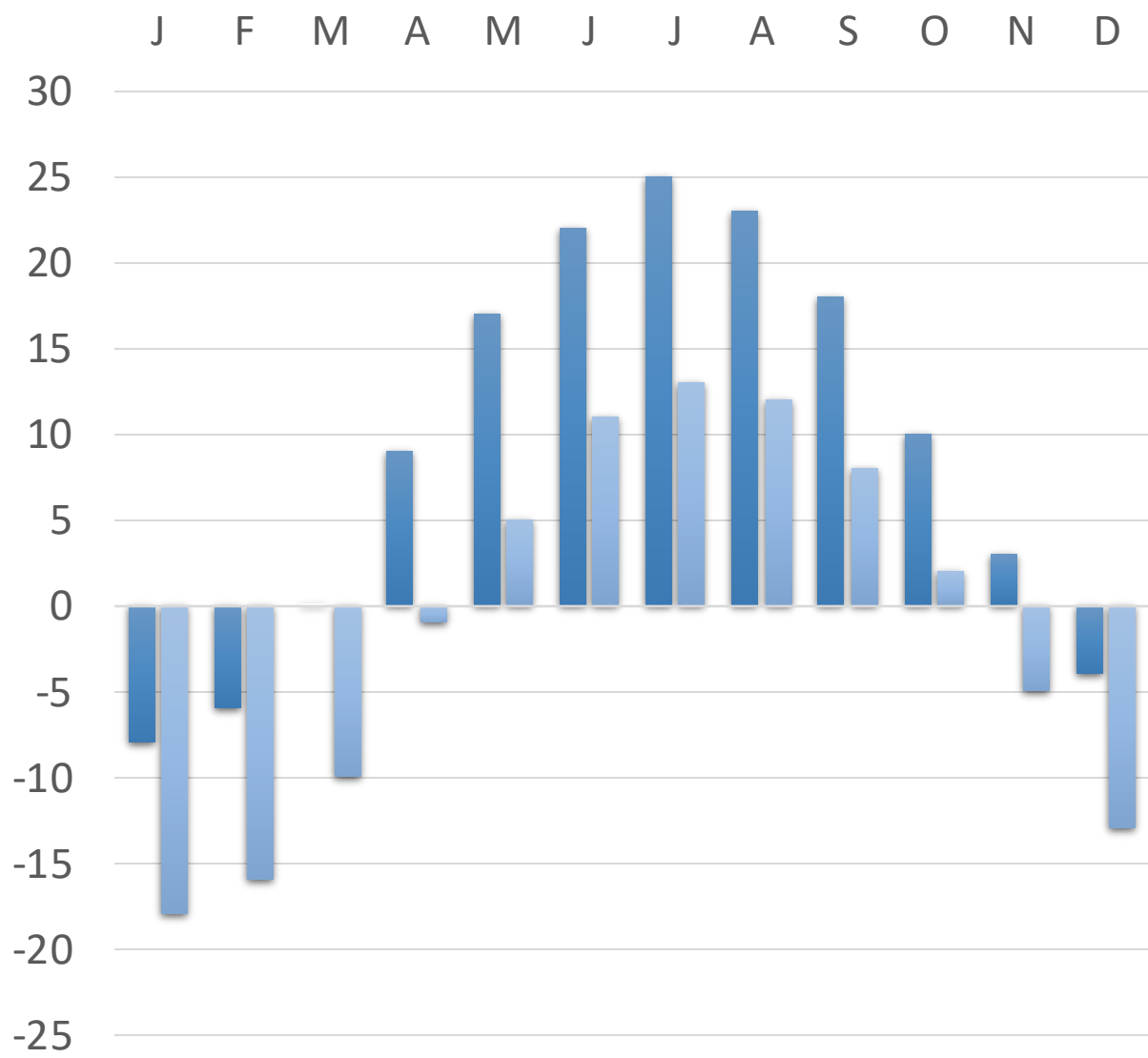
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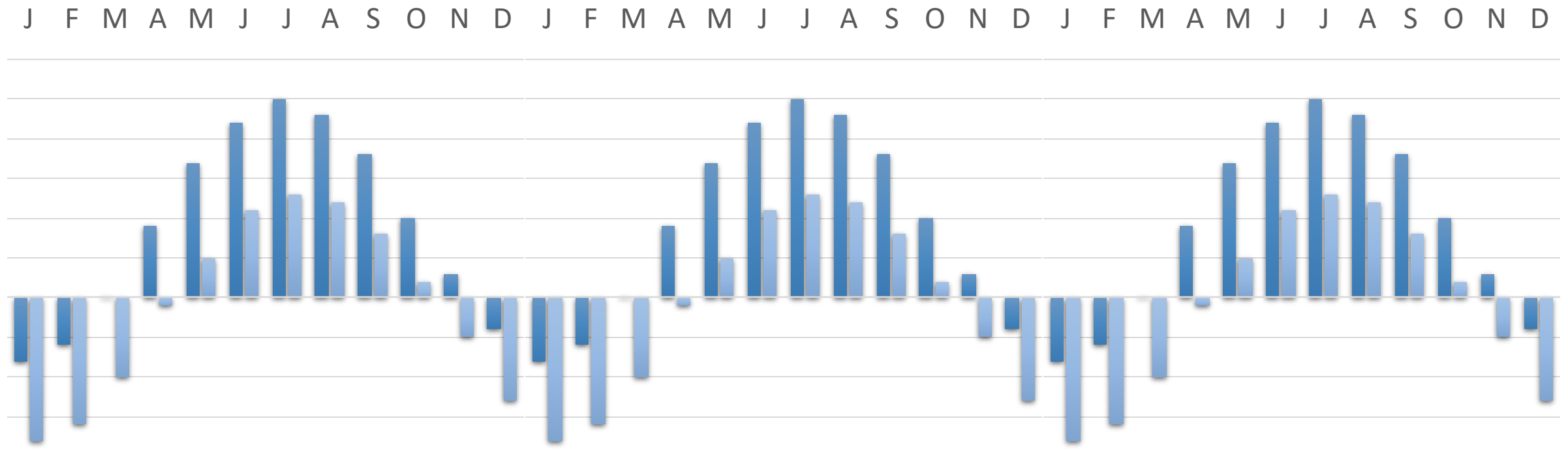
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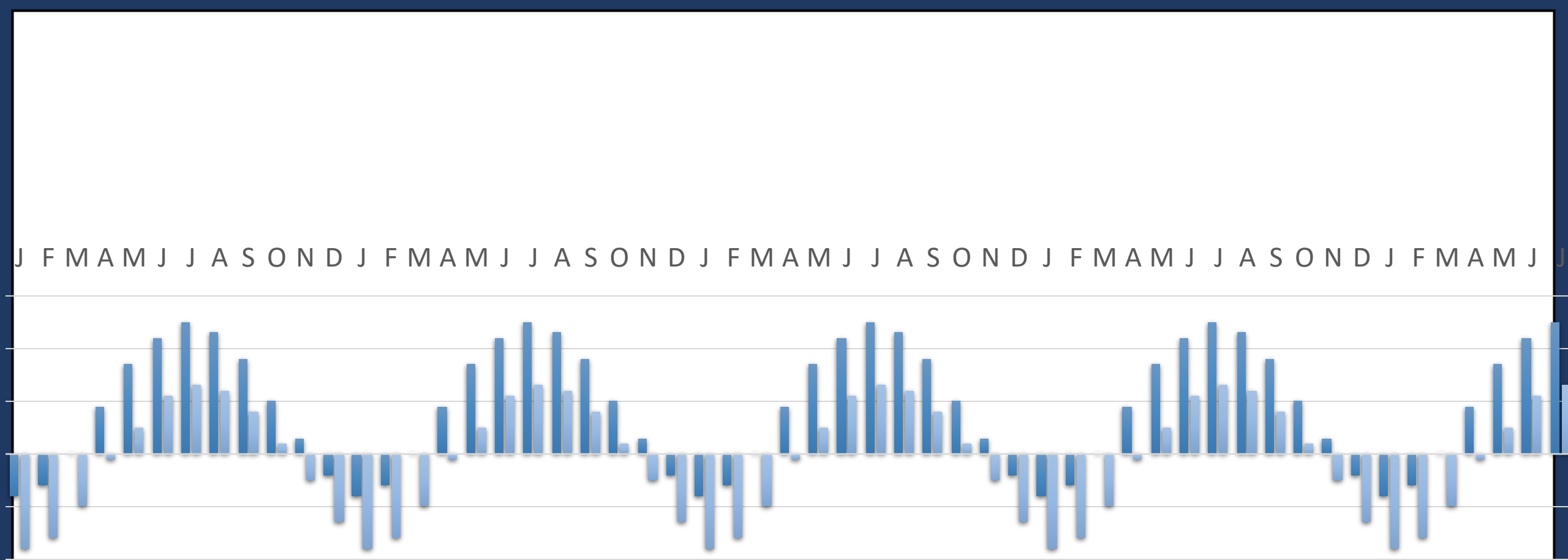
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D

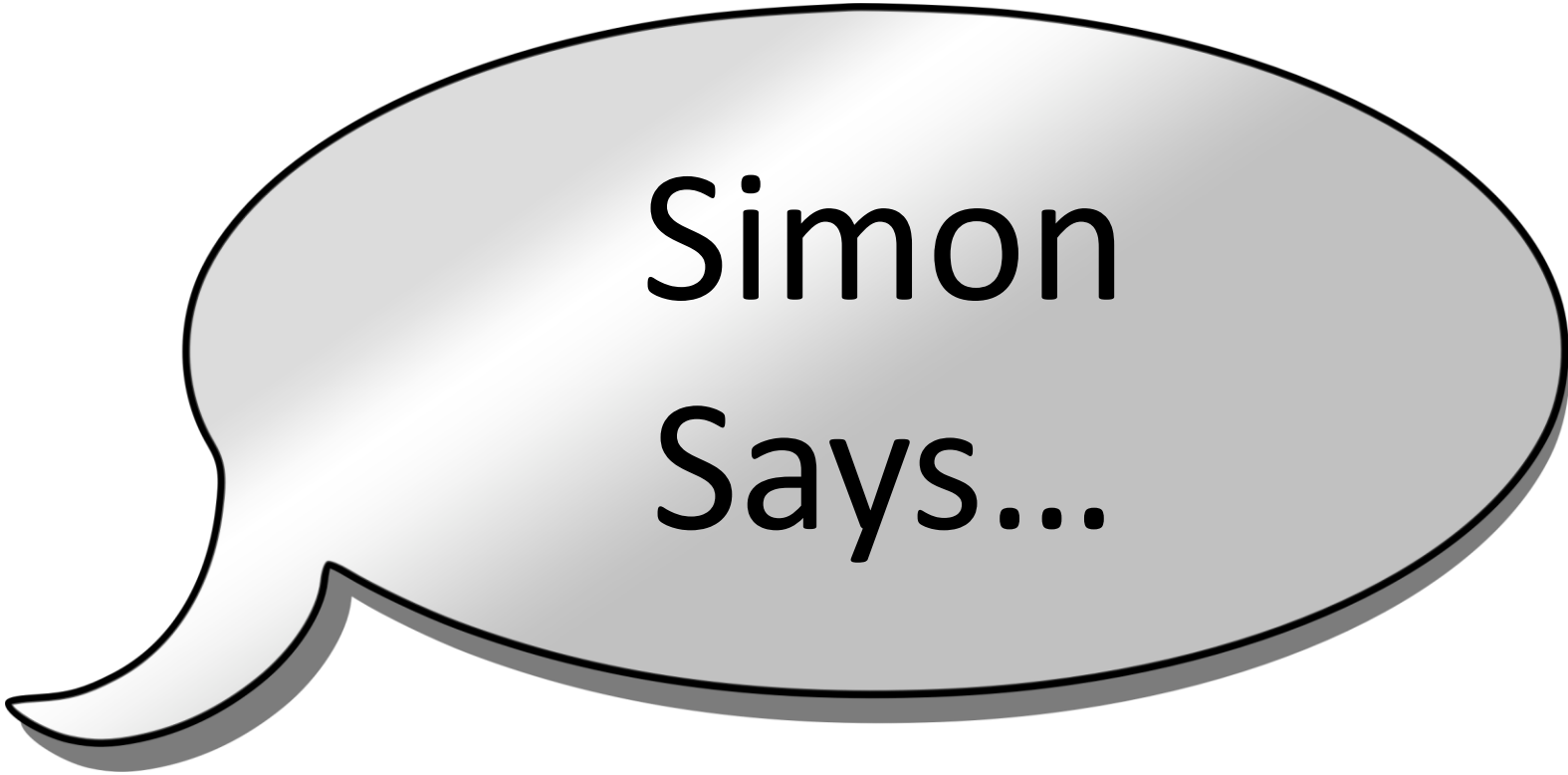






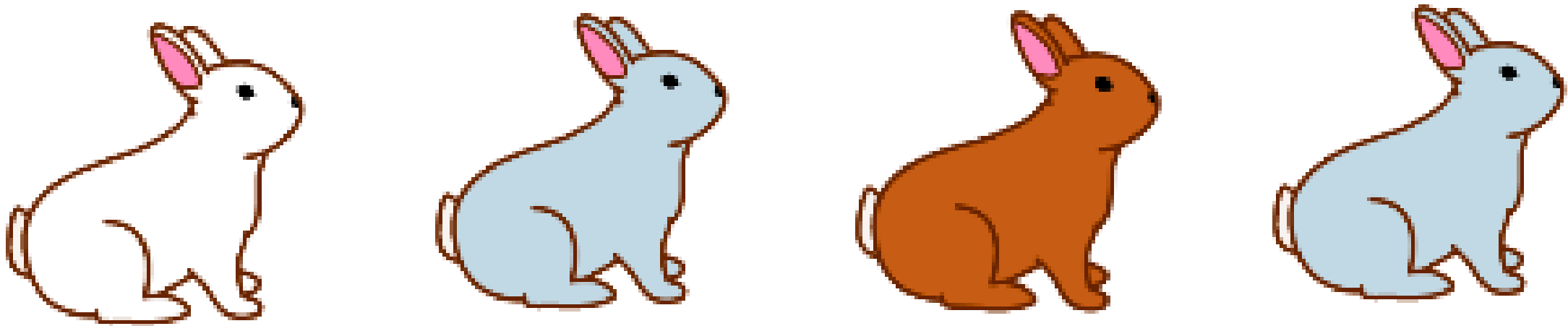


Offline Activity



Simon
Says...

Patterns in Nature



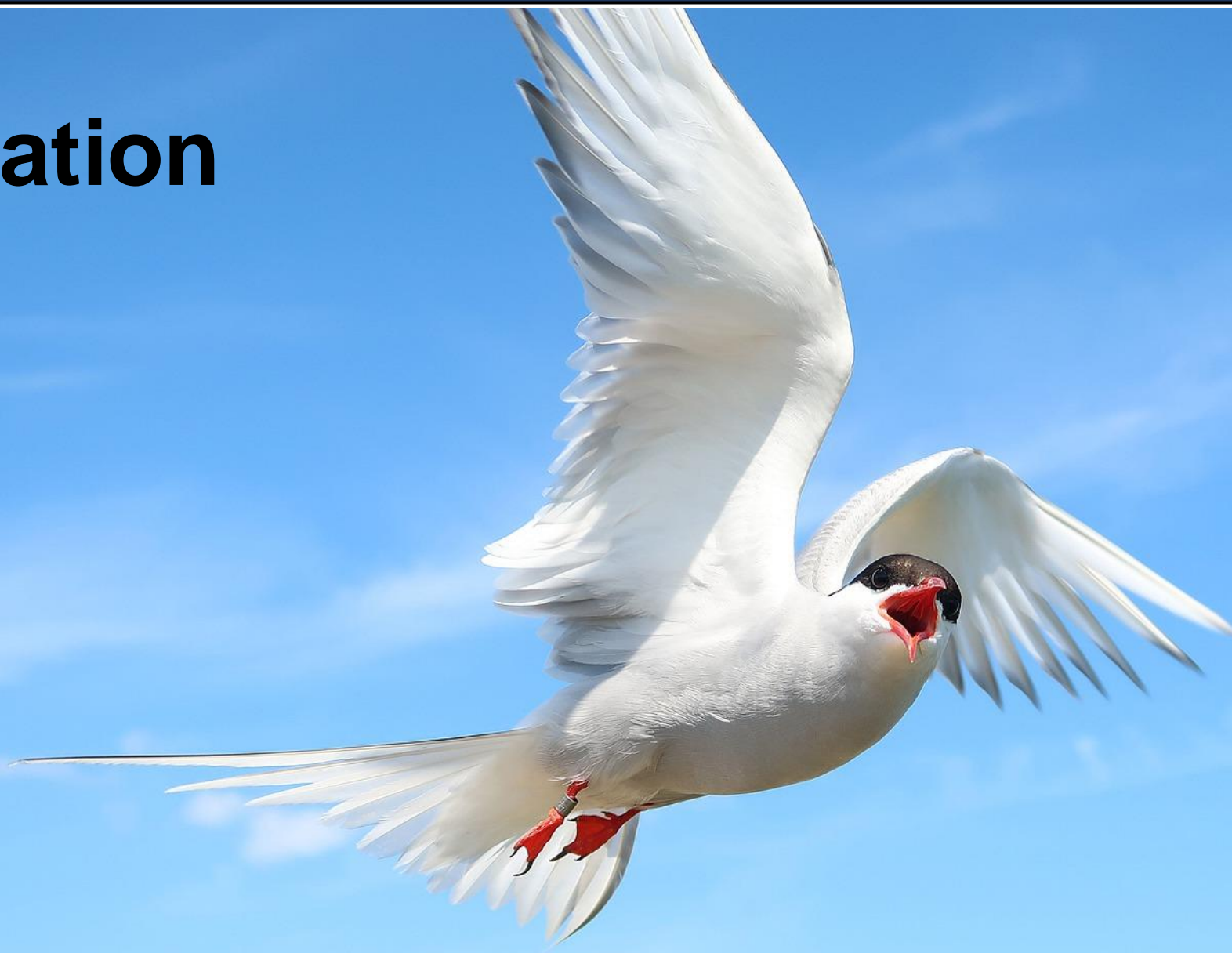
Seasonal changes



Migration



Migration



Migration

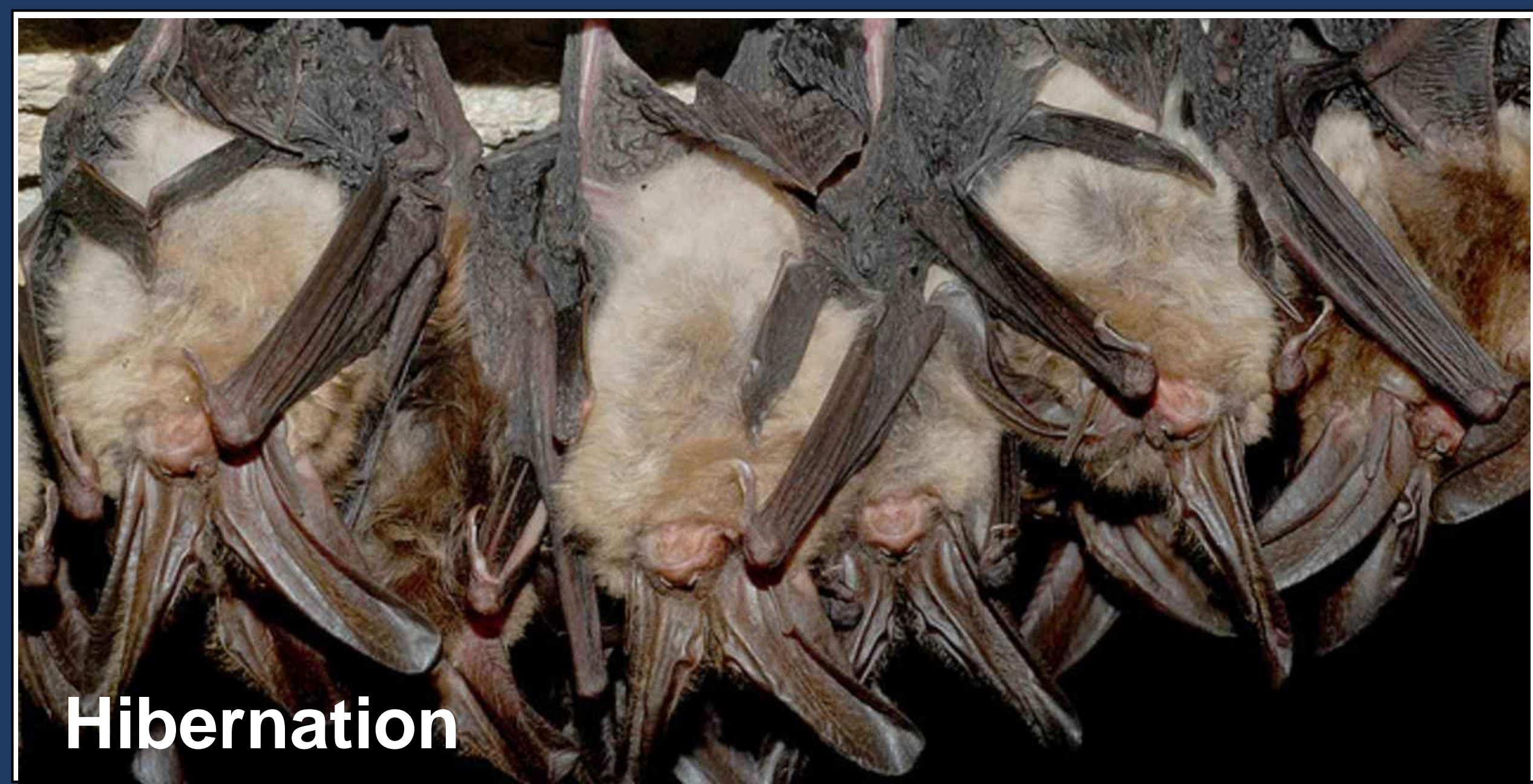


Adaptation



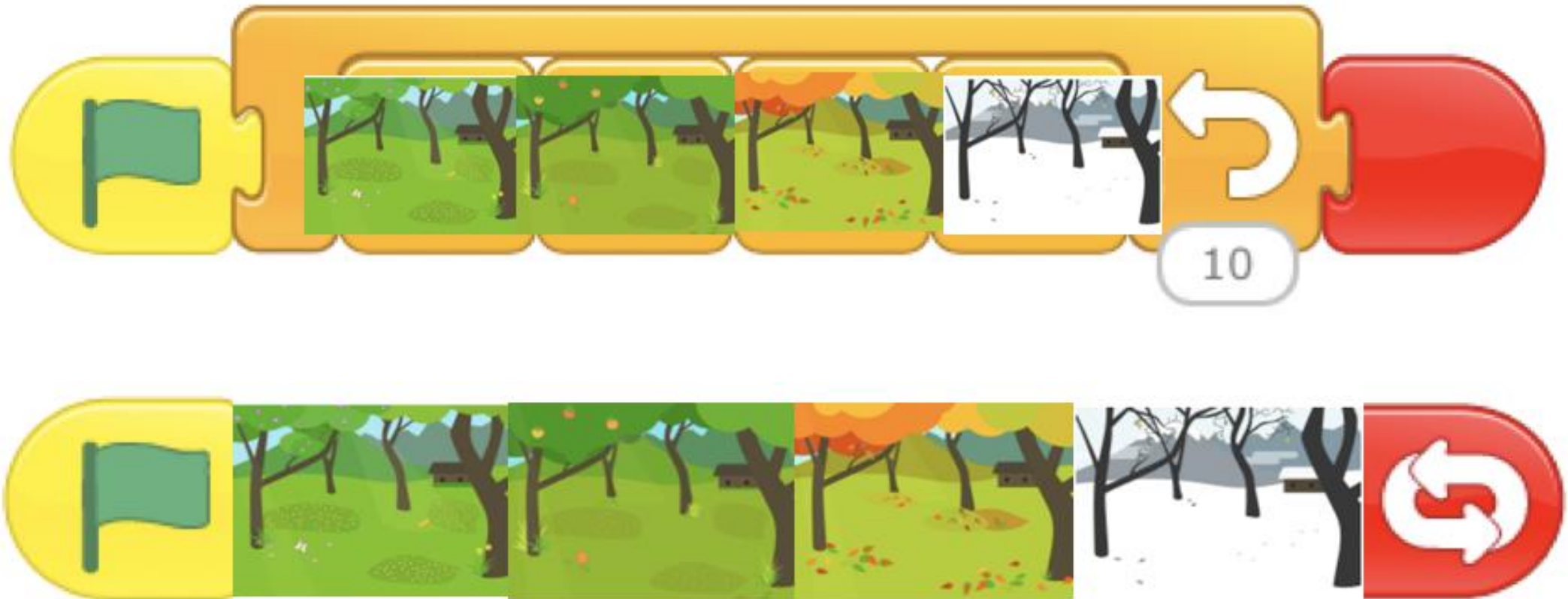
Adaptation





Hibernation

Coding Activity – Loops



1 2 1 3 1 2 1 3 1 2 1 3 1

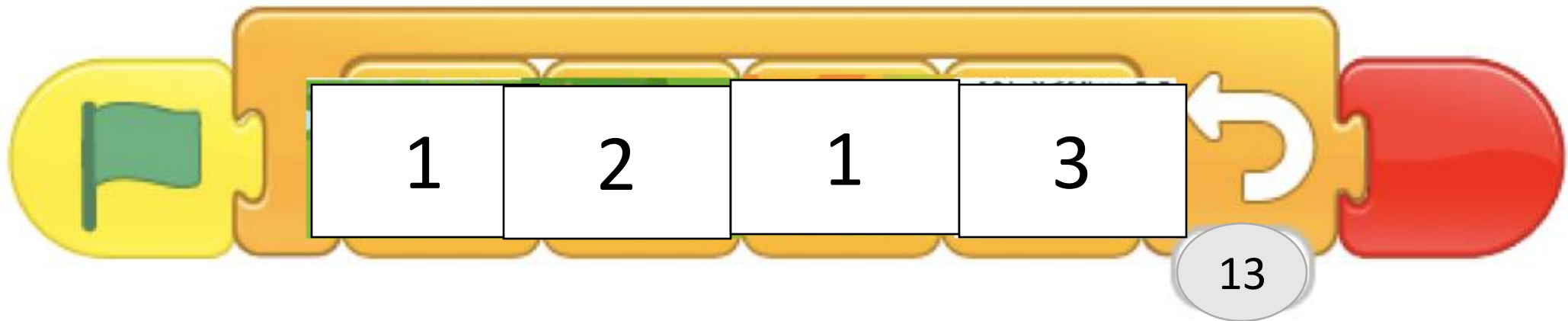
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1 3 1 2 1 3 1 2 1 3 1 2 1

3 1 2 1 3 1 2 1 3 1 2 1 3

1 2 1 3

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2 1 3 1 2 1 3



Conditional Statements

- At school:

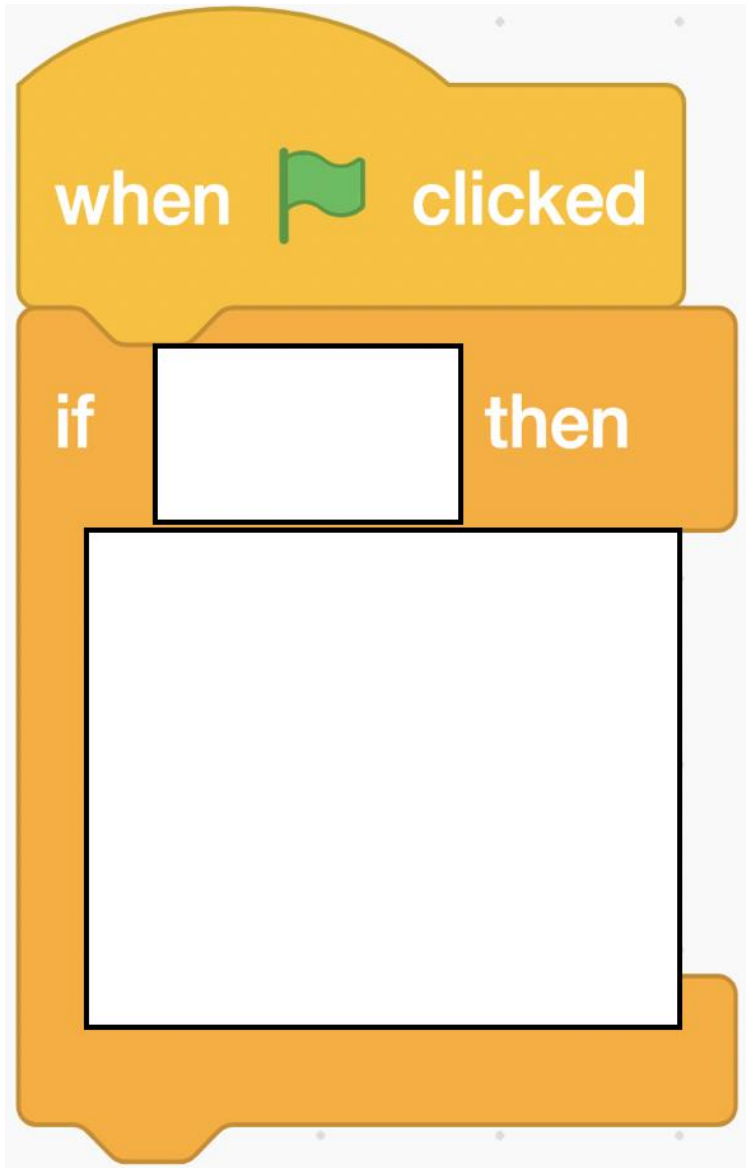
- If the fire alarm goes off, then
- If I arrive to school late, then
- If the bell rings, then
- If we eat lunch, then

- In sports/games:


- If the referee blows the whistle, then
- If the timer runs out, then
- If I match 2 cards, then
- If I play an 8, then


Conditional Statements


- About gadgets:
 - If I press start on the microwave, then
 - If the battery says 1% on a device, then
 - If I press the space bar on a computer then,
- About weather:
 - If it is raining, then
 - If it is snowing, then



Coding Activity – Drawing Conditional Statements

when  clicked

if  then



when  clicked


if  then



when  clicked

if  then



when  clicked

if  then



when  clicked

forever

if



then



if



then



if



then



if



then



Math Activity - ScratchJr

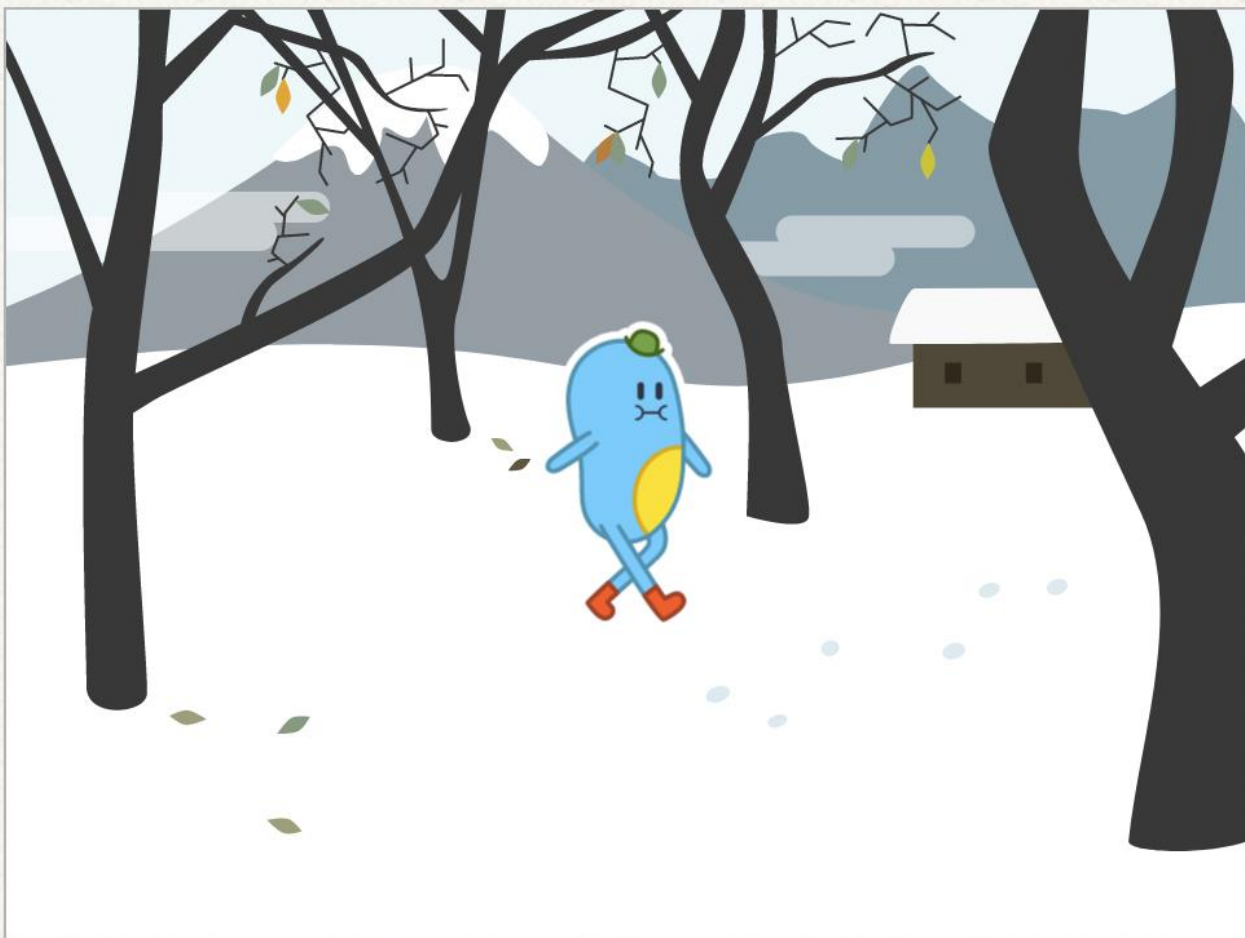


Tablets and Devices

<https://www.scratchjr.org/>

Desktops

<https://jfo8000.github.io/ScratchJr-Desktop/>



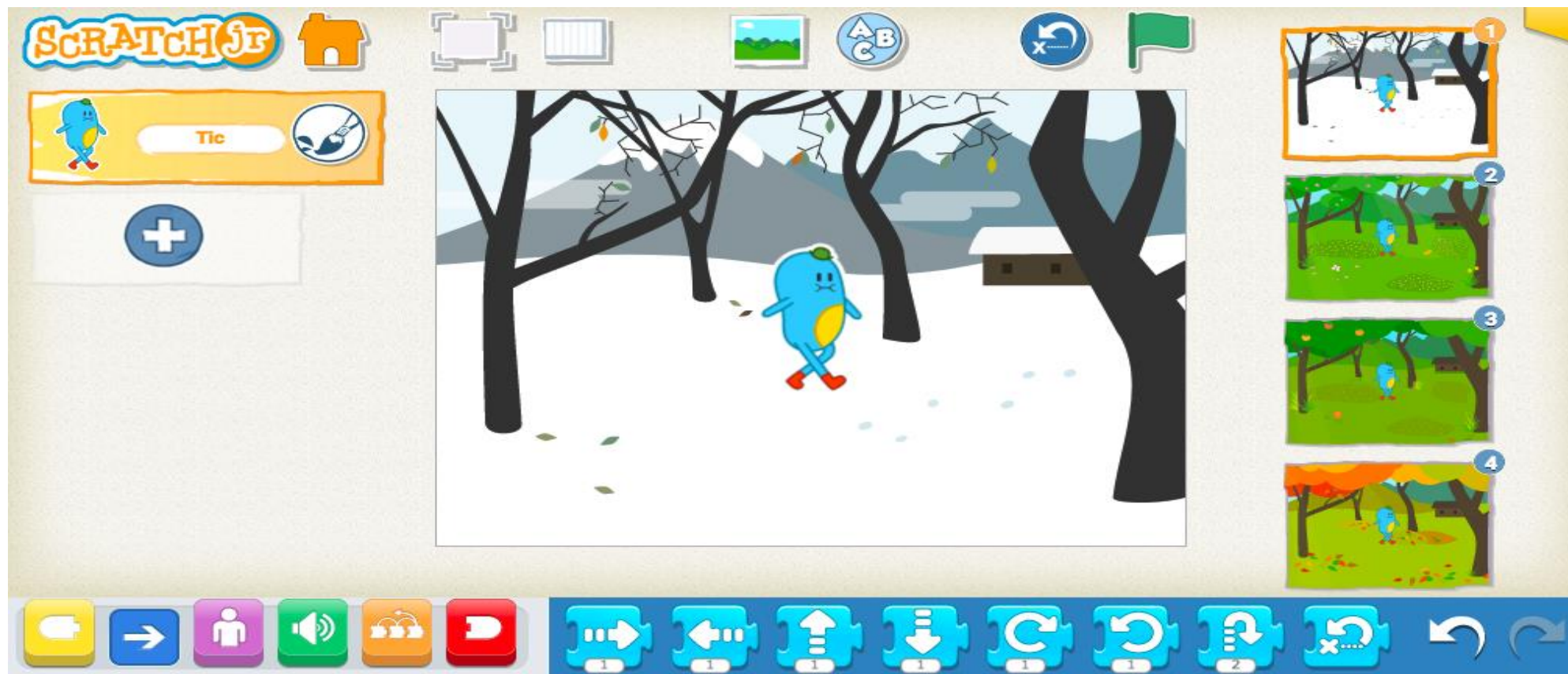
Code Blocks for each Page











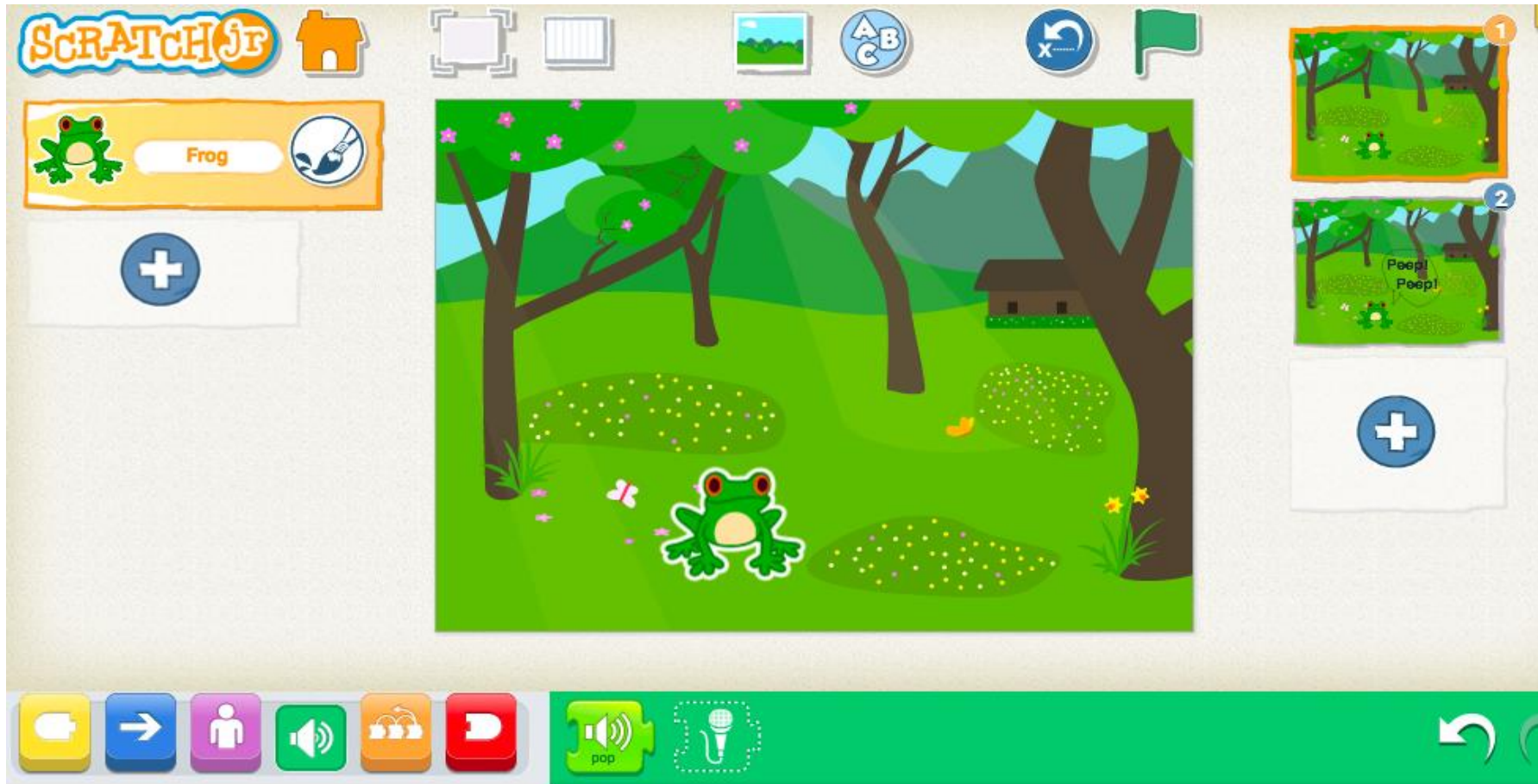
Example 2













Thank You!!



educators@sciencenorth.ca