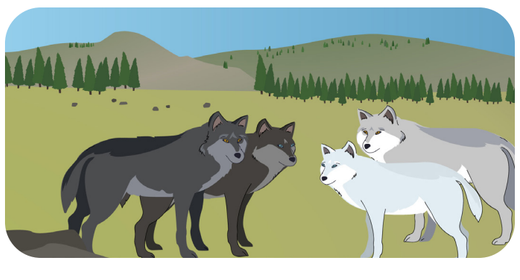
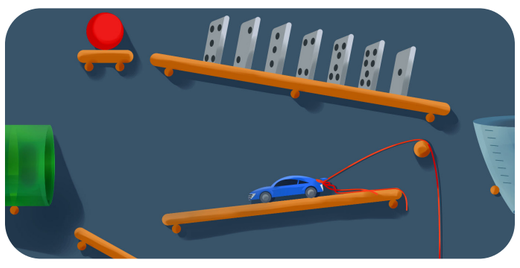
Crosscutting Concepts

Which crosscutting concepts have you used today?



1. PATTERNS

Observing patterns helps us think about relationships and make predictions. What patterns do you see? How can you explain them? What predictions can they help you make?

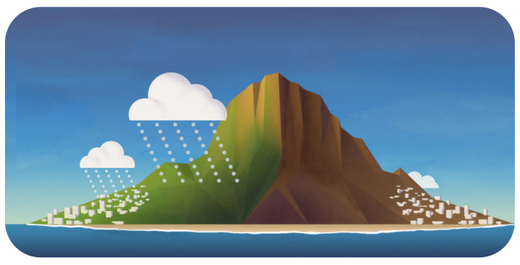


2. CAUSE AND EFFECT: MECHANISM AND EXPLANATION

Figuring out what causes what can help us explain and predict. Why did that happen? What did that cause?

3. SCALE, PROPORTION, AND QUANTITY

We can observe, compare, and explain phenomena at different scales of size, time and energy. How big or small is this? How much time did this take? How does it compare to ....?

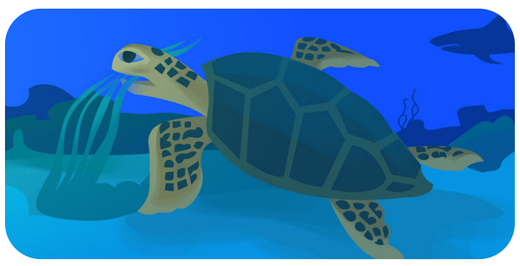


4. SYSTEMS AND SYSTEM MODELS

Thinking about the parts of a system and how they affect each other helps us understand and test ideas. What are the parts of the system? How do they affect each other?

5. ENERGY AND MATTER: FLOWS, CYCLES, AND CONSERVATION

Tracing how energy and matter move can help us understand systems. Where did the matter or energy come from? Where did it go? Why?



6. STRUCTURE AND FUNCTION

How something is shaped or made can affect its properties and how it works. What is its shape or how is it made? How does that affect how it works?

7. STABILITY AND CHANGE

Observing when a system changes and when it stays the same can help us understand how this system works. What is staying the same? What is changing? Why?

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