Mastery Checklists – Geometry

Program Year One

Geometry Activities	CSM	Presented (Date)	Practicing (Date)	Mastered (Date)	Notes/Observations
Reviewing Shapes with the **Demonstration Tray**					
Working with the **Geometric Cabinet**					
Exploring Shapes with the **Geometric Form Cards**					
Reviewing Shapes with the **Constructive Triangles**					
Learning the Concepts of Point, Line, Plane, and Solid	•				
Reviewing the Concepts of Point, Line, Plane, and Solid					
Learning About Straight and Curved Lines	•				
Studying the Parts of the Line					
Learning About Horizontal, Vertical, and Oblique Lines					

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Geometry Activities	CSM	Presented (Date)	Practicing (Date)	Mastered (Date)	Notes/Observations
Understanding Relationships Between Lines: Parallel, Divergent, and Convergent Lines	•				
Understanding Relationships Between Lines: Intersecting, Perpendicular, and Oblique Lines	•				
Learning About an Angle and Its Parts					
Learning Five Types of Angles	•				
Making Open and Closed Figures					
Learning the Difference Between Closed Curved Figures and Polygons	•				
Studying Irregular Polygons					
Studying Regular Polygons					
Learning Some Closed Curved Figures					
Learning the Parts of a Triangle					
Classifying Triangles by Their Sides	•				

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Geometry Activities	CSM	Presented (Date)	Practicing (Date)	Mastered (Date)	Notes/Observations
Classifying Triangles by Their Angles	•				
Learning the Types of Quadrilaterals	•				
Making Quadrilaterals with **Geometry Sticks**					
Learning About Regular Many-Sided Polygons	•				
Forming Regular Many-Sided Polygons					
Reviewing the **Geometric Solids**	•				

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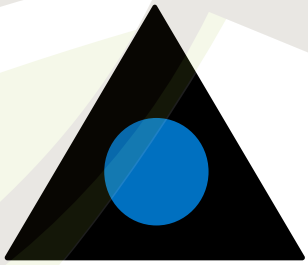
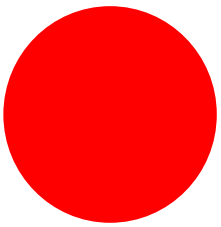
Montessori Grammar Symbols Key

	noun
	article
	adjective
	abstract noun
	verb

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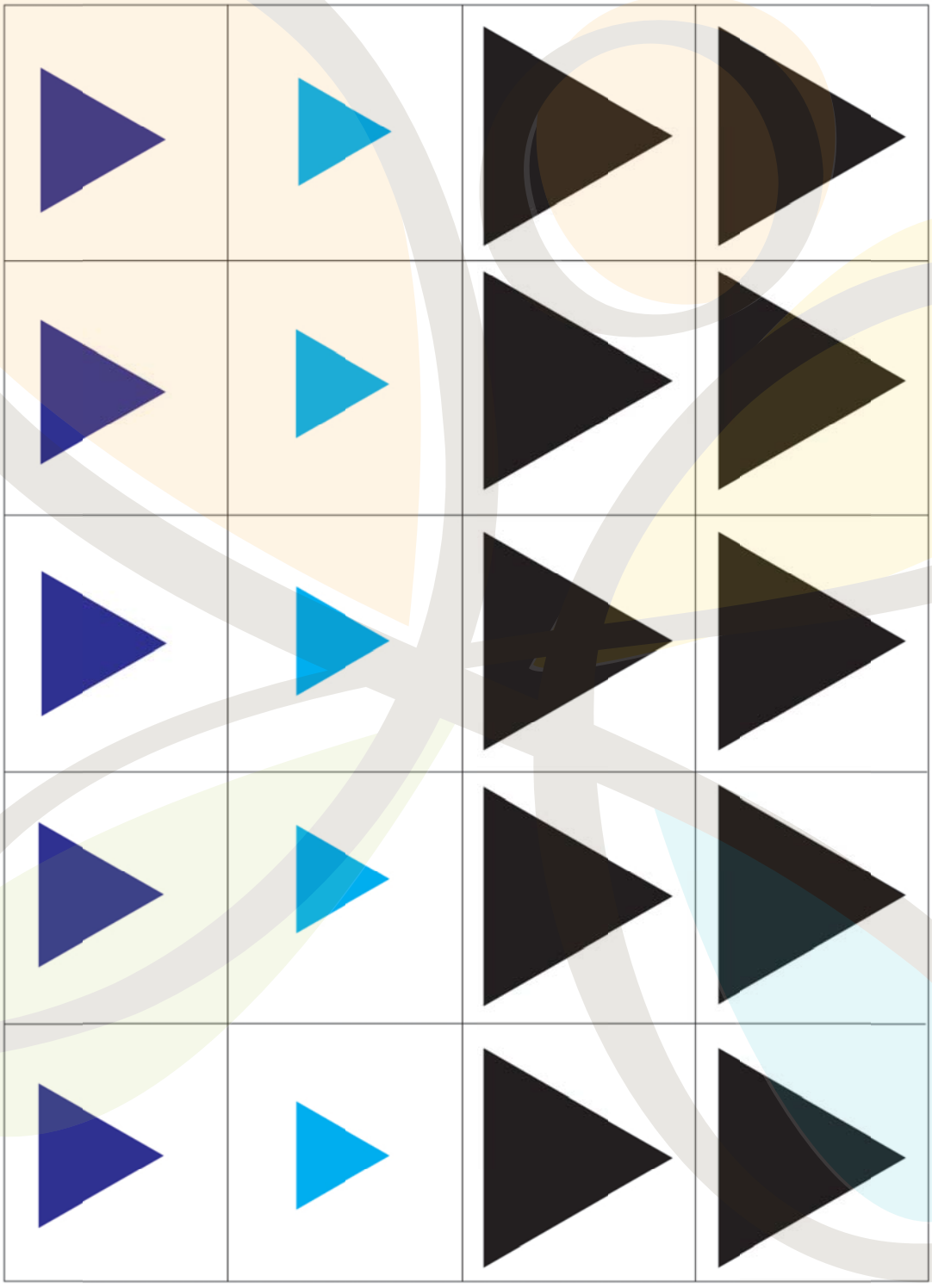
Montessori Grammar Symbols



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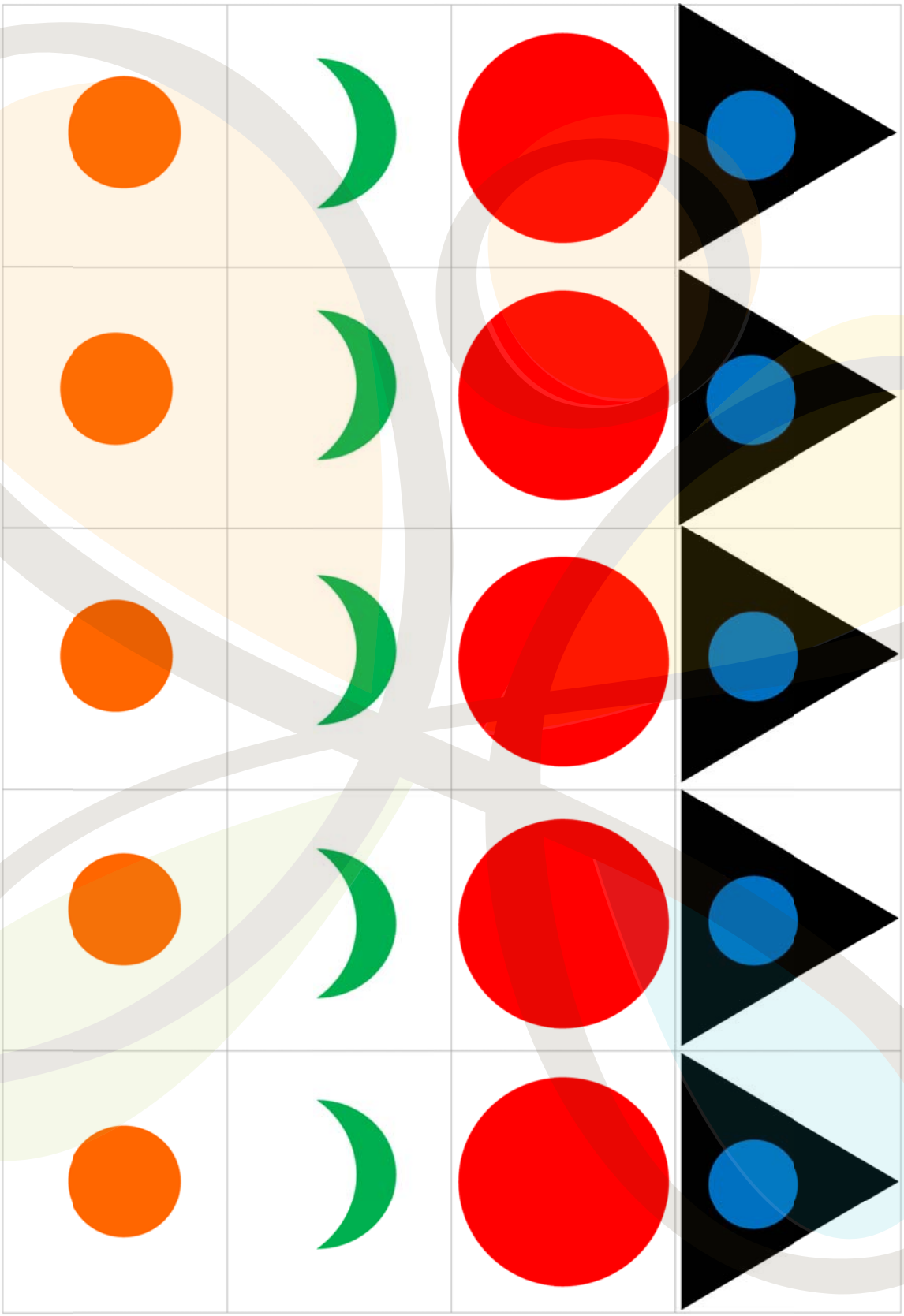

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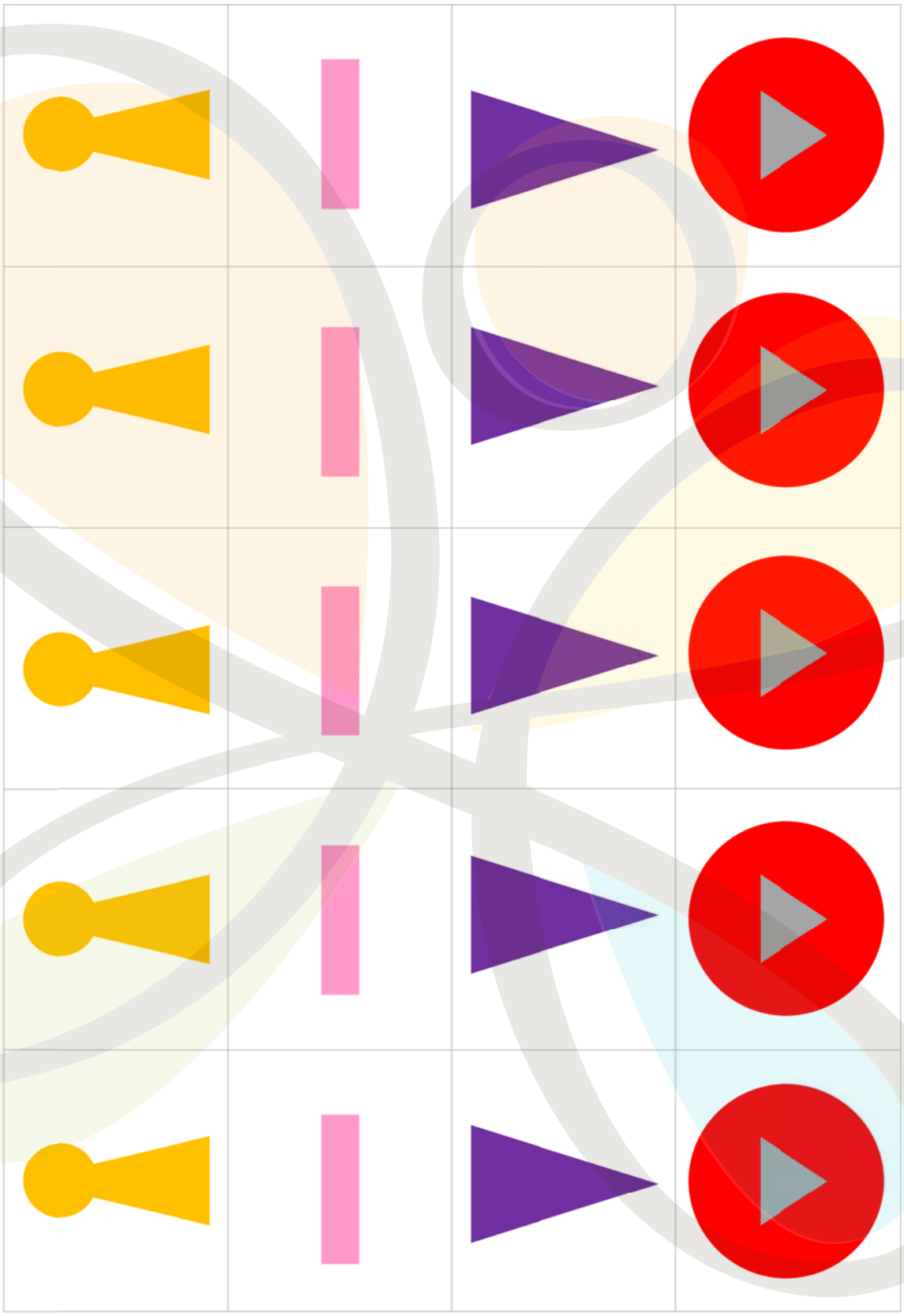

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Equation Slips, 7-Digit by 2-Digit Multiplication

7,834,252 × 43 =	5,321,854 × 22 =
2,330,952 × 51 =	8,722,310 × 14 =
7,456,214 × 48 =	3,673,167 × 73 =
4,654,031 × 25 =	1,155,429 × 67 =
6,455,842 × 44 =	4,655,468 × 83 =
5,421,103 × 70 =	2,157,851 × 16 =
4,642,118 × 22 =	7,431,852 × 48 =

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4,642,118 × 22 =	7,431,852 × 48 =

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7,834,252 × 43	3,274,355 × 51
8,317,043 × 76	4,210,545 × 32
1,608,953 × 94	2,464,686 × 40
5,347,951 × 19	4,531,804 × 65

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Geometry 5

1. Mark each shape as

- C closed curved figure
- P polygon
- N neither

a) ☐

b) ☐

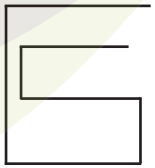
c) ☐

d) ☐

e) ☐

f) ☐

g) ☐

h)  ☐

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Geometry 6

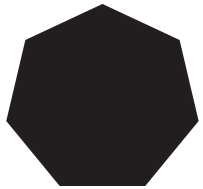
1. Mark each shape as

- R regular polygon
- I irregular polygon

a) ☐

b) ☐

c) ☐

d)  ☐

e) ☐

f) ☐

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Geometry 5 - control

1. Mark each shape as

- C closed curved figure
- P polygon
- N neither

a) C

b) P

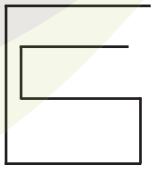
c) P

d) N

e) P

f) N

g) C

h)  N

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Geometry 6 - control

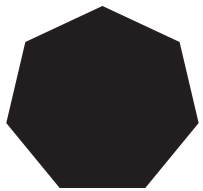
1. Mark each shape as

- R regular polygon
- I irregular polygon

a) R

b) I

c) I

d)  R

e) I

f) I

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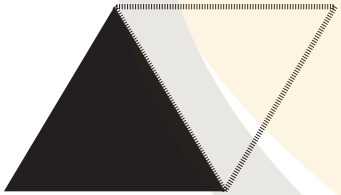
Geometry 15

1. Create new shapes by adding triangles to the shapes provided. For example, make a rhombus by drawing an equilateral triangle on top of another equilateral triangle (see example below).



a)

b)

c)

d)

e)

f)

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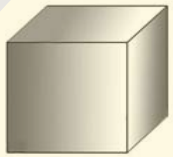
Geometry 16

1. Circle all of the shapes that make up the following Geometric Solids.

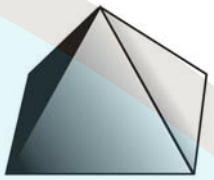
a)

b)

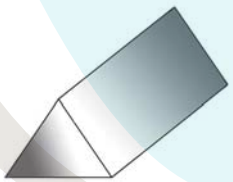


c)

d)



e)



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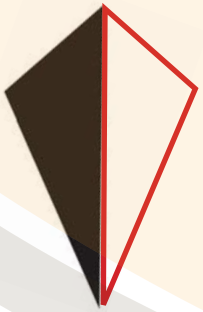
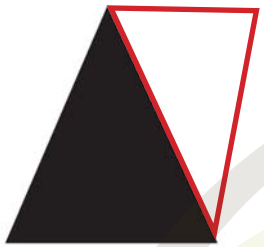
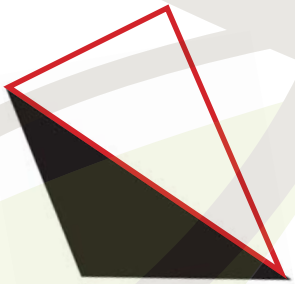
Geometry 15 - control

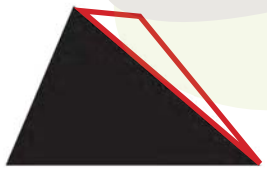
1. Create new shapes by adding triangles to the shapes provided. For example, make a rhombus by drawing an equilateral triangle on top of another equilateral triangle. Here are examples of shapes you can make. Your shapes may look different.

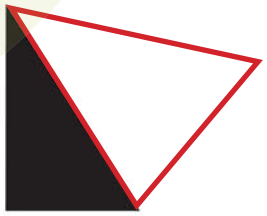
a)

b) 

c) 

d) 

e) 

f) 

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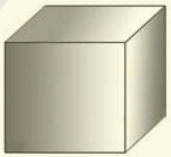
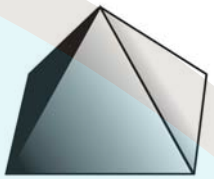
Geometry 16 - control

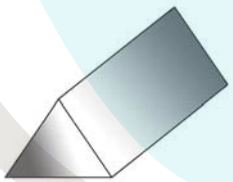
1. Circle all of the shapes that make up the following Geometric Solids.

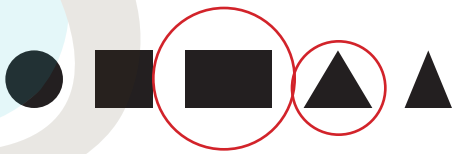
a)

b) 

c)

d) 

e) 



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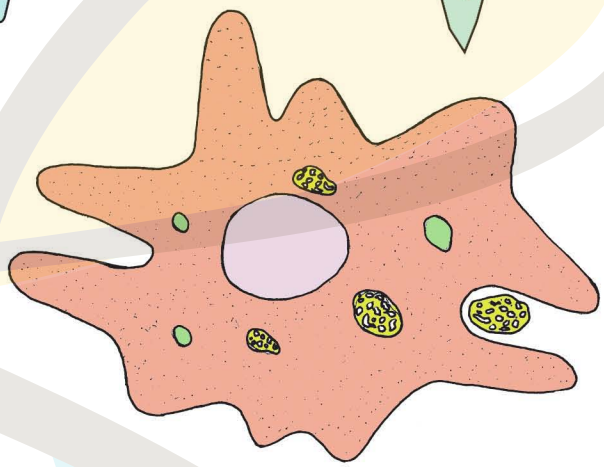
4600 MYA | 4000 MYA | 3500 MYA | 3000 MYA | 2500 MYA | 2000 MYA | 1500 MYA | 1000 MYA

Precambrian Era

pre = before Cambria = Roman name for Wales

4600 MYA

The earth along with the rest of the solar system were formed approximately 4.6 billion years ago. The Precambrian Era totals about 4 billion years, which is more than 80 percent of all geologic time.



Prokaryote, single-celled organism

The earth's atmosphere formed, its crust hardened, rain fell and volcanoes formed, and the oceans were filled with minerals. Continents were formed on plates. Plant-like life began in the water.

Few fossils of life forms have been found from this time.

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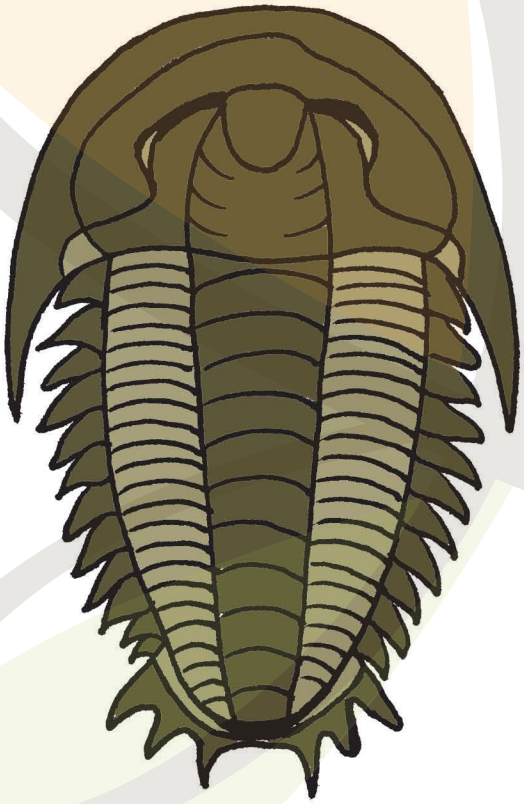
550 MYA | 530 MYA | 510 MYA | 490 MYA | 470 MYA | 450 MYA

Paleozoic Era

Palaios = ancient zoe = life

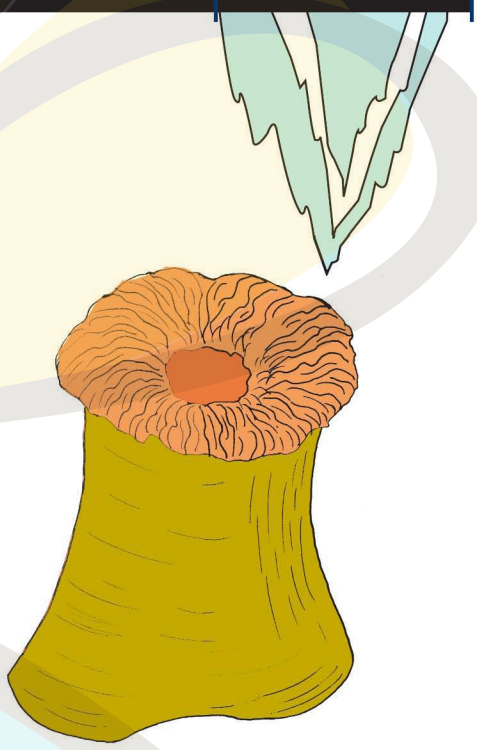
543 MYA — Cambrian Period

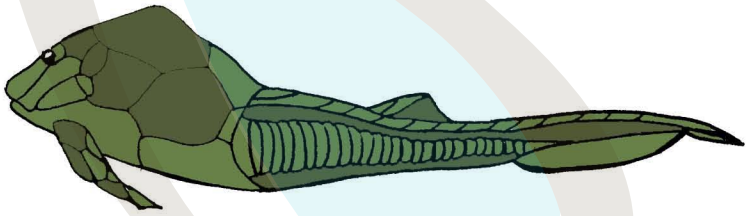
490 MYA — Ordovician Period



The Cambrian period is significant for the first fossils of shelled organisms. The dominant groups of marine invertebrates are Trilobites and Brachiopods.

The Ordovician Period is the second of the Paleozoic Era, and is named from the early Celtic tribe, the Ordovices, that once lived in northwest Wales. Most life in this period lived in the water.





Bony, jawless fishes existed and algae-like plants lived in the water.

Age of Invertebrates/Age of Trilobites

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440 MYA | 430 MYA | 420 MYA | 410 MYA | 400 MYA | 390 MYA | 380 MYA | 370 MYA

Paleozoic Era

440 MYA — 410 MYA

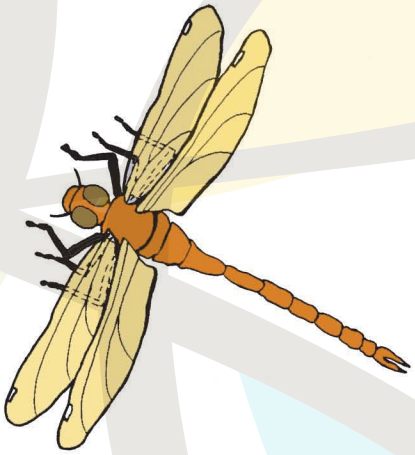
Silurian Period

Silurian is named for the Silures, an early Celtic tribe from Wales. Coral reefs were extensive, arthropods were common, and vertebrates began to expand.

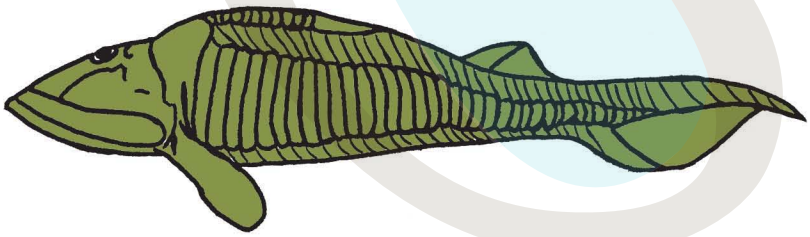
Plants moved onto dry land.

Devonian Period

This period is named for an area in England called Devon, where the rocks from this time are located.



Life began to further develop and moved onto land. Insects and amphibians appeared and aquatic life, particularly fish, was abundant.



Age of Fishes

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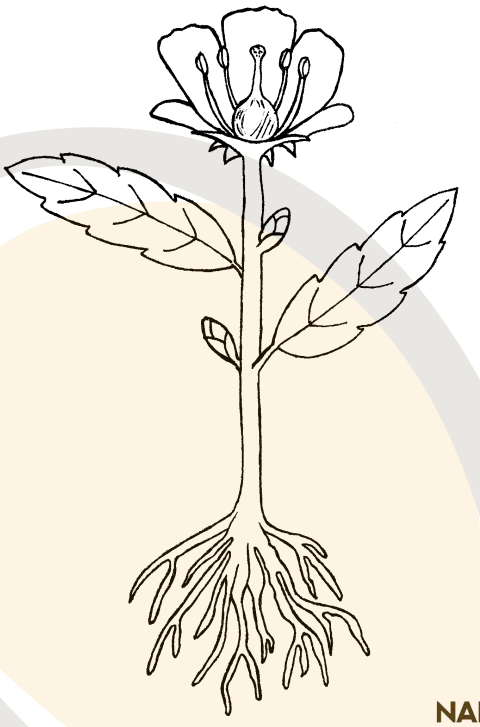
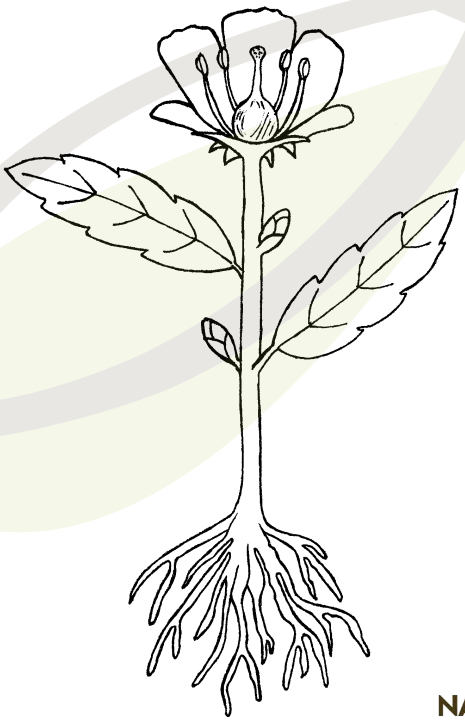


plant

An organism that has roots, a stem, leaves and often flowers.

plant



root

The downward growing part of a plant. It provides support and takes in water and nutrients from the soil.

root

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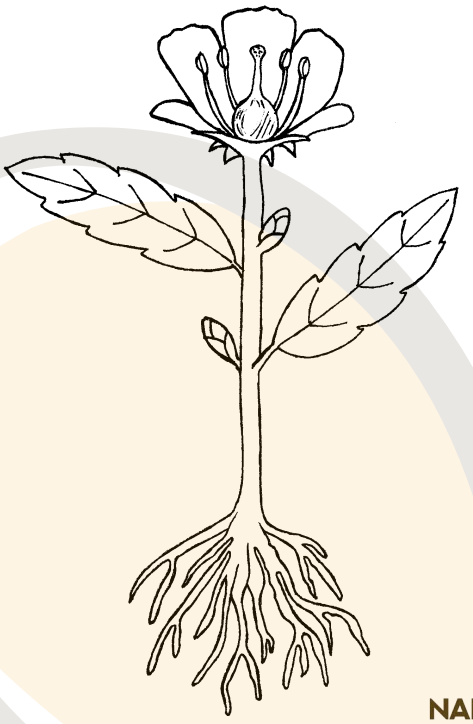
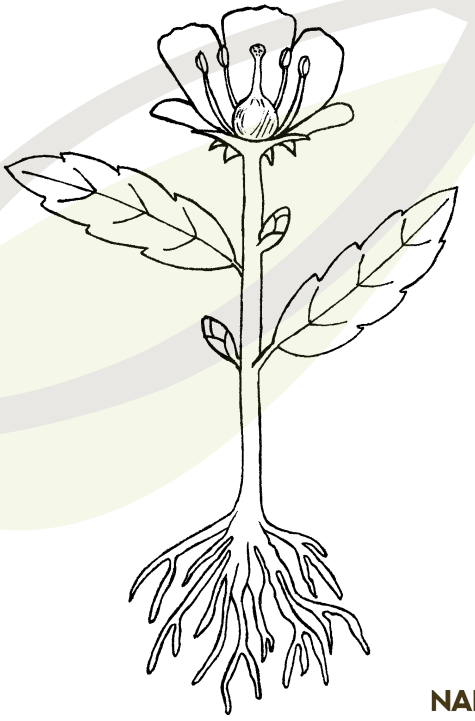


stem

This part of a plant often grows upward, provides support, and contains channels to transport water and nutrients to the various parts of the plant.

stem



leaves

These thin, flat blades which generally grow from the stem contain veins that carry nutrients and provide support. They are usually green.

leaves

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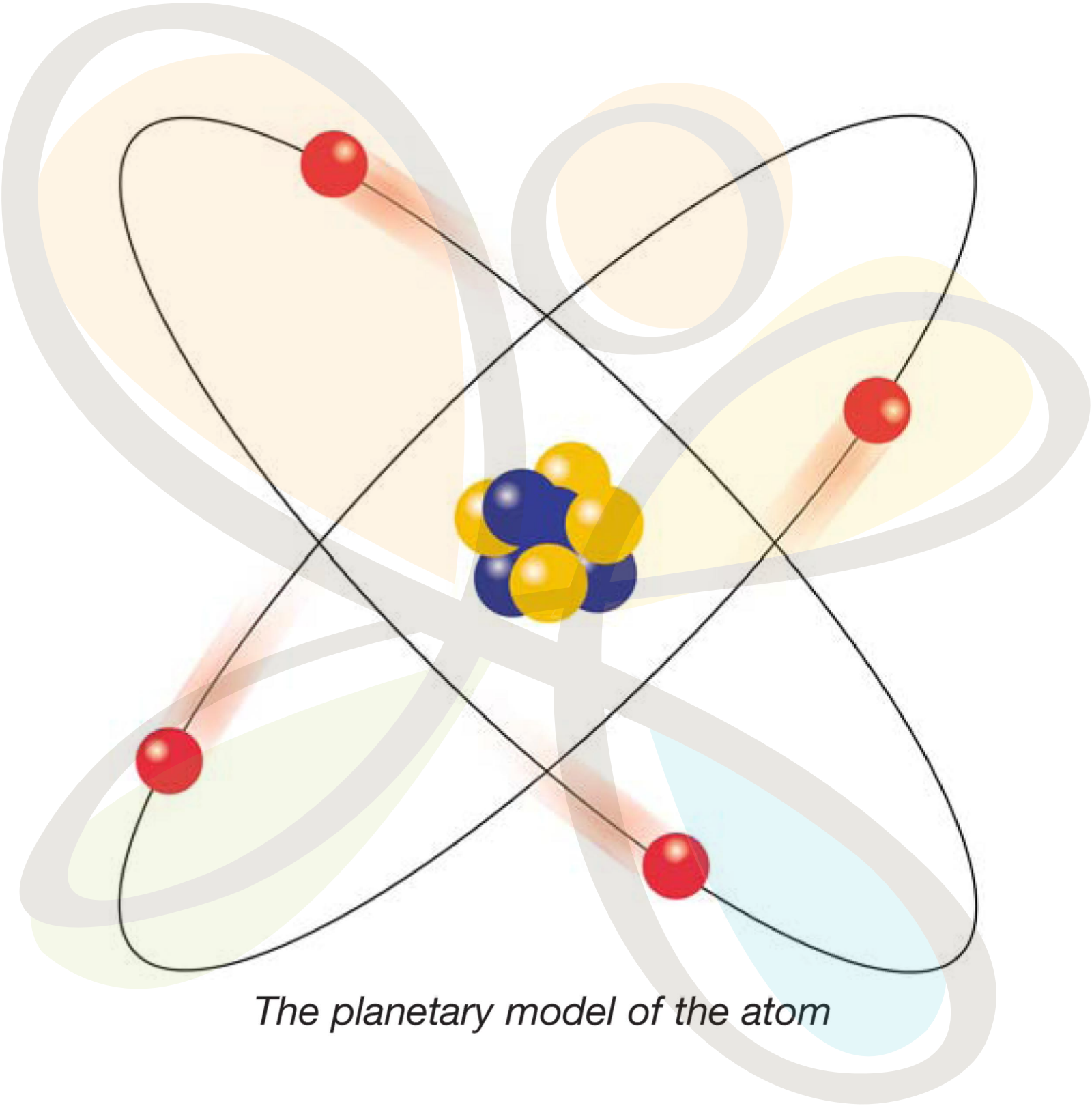

The planetary model of the atom

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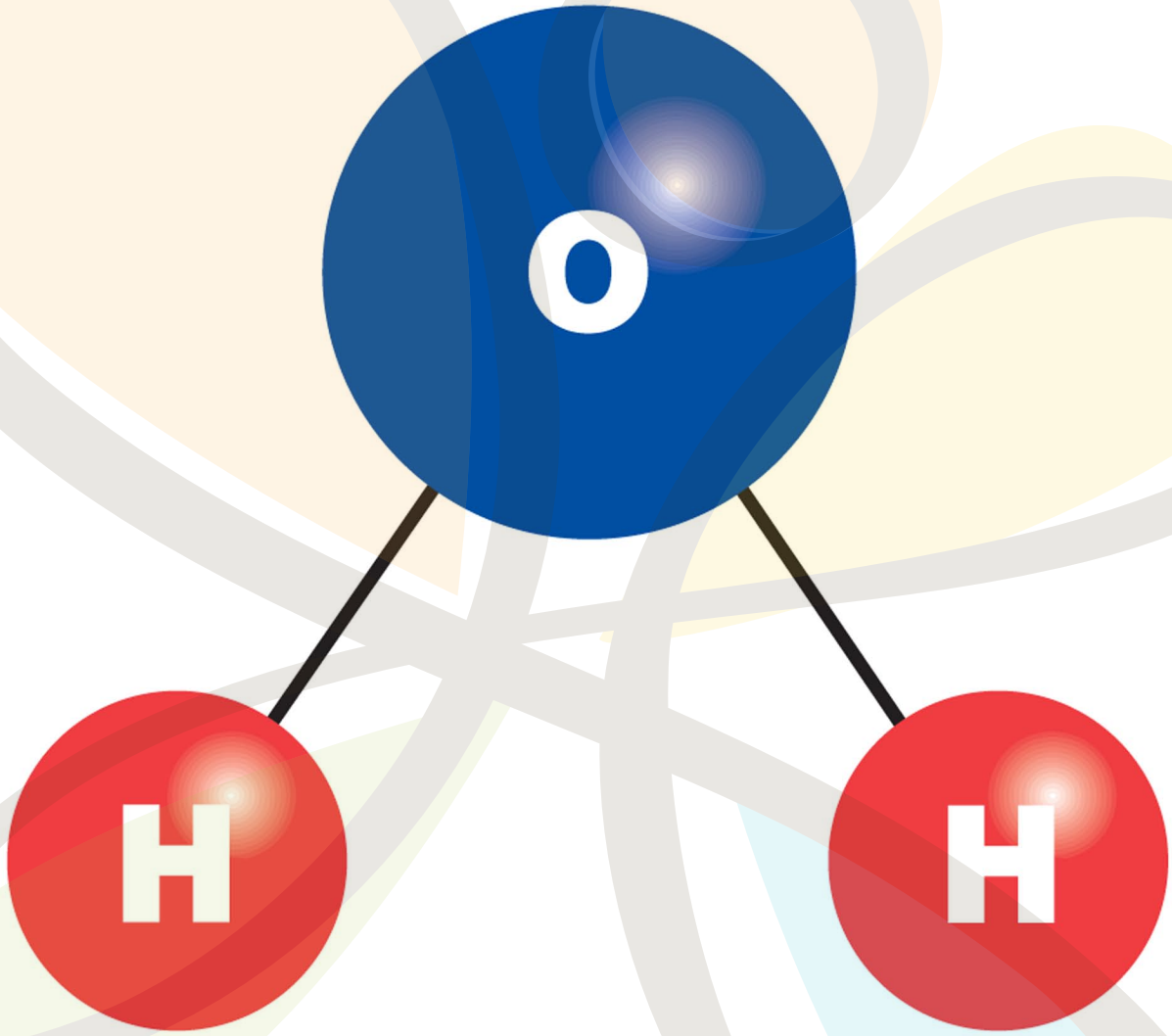

A water molecule

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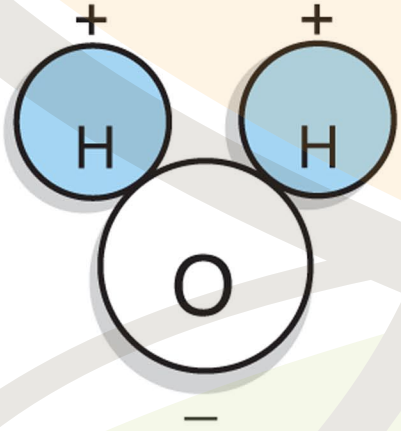

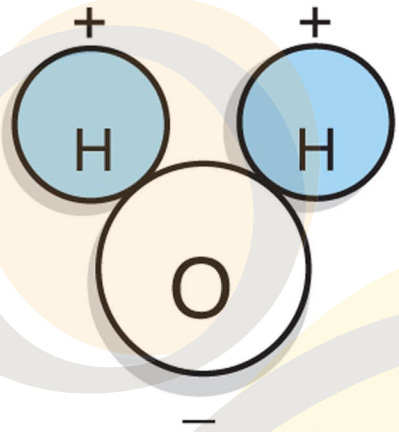

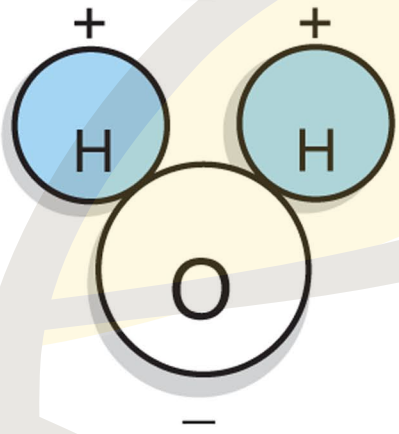

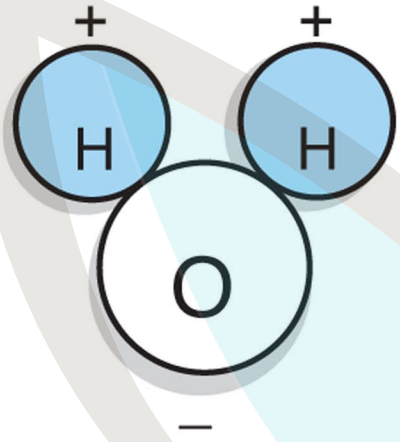

How water molecules join together

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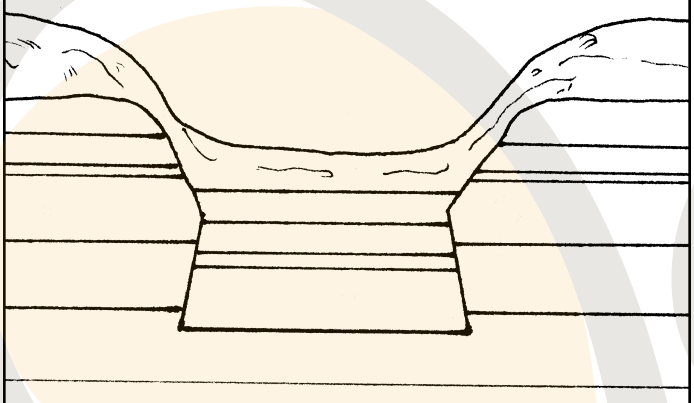
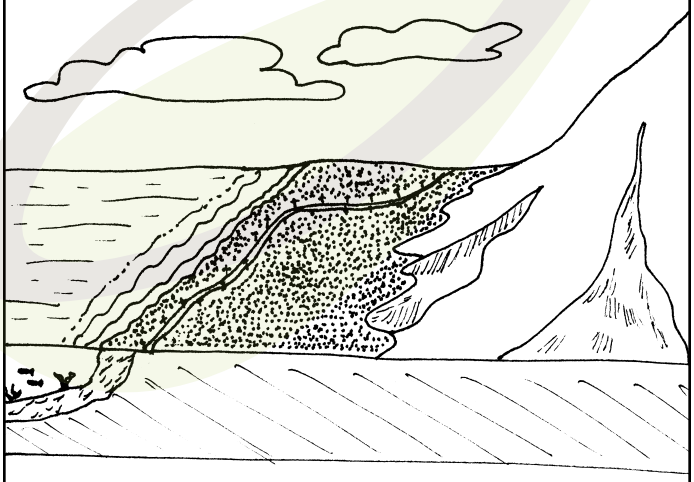


fault-block mountain

This type of mountain forms when portions of the earth's crust collide along a fault, causing the upheaval of large blocks of rock.

fault-block mountain



coastal plain

This is a low area of land along the coast between the ocean and the highlands. It is an extension above water of the submerged continental shelf composed mainly of marine sediment.

coastal plain

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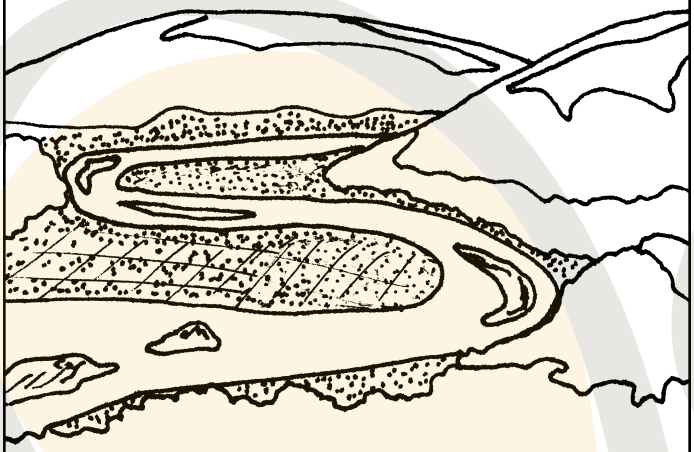
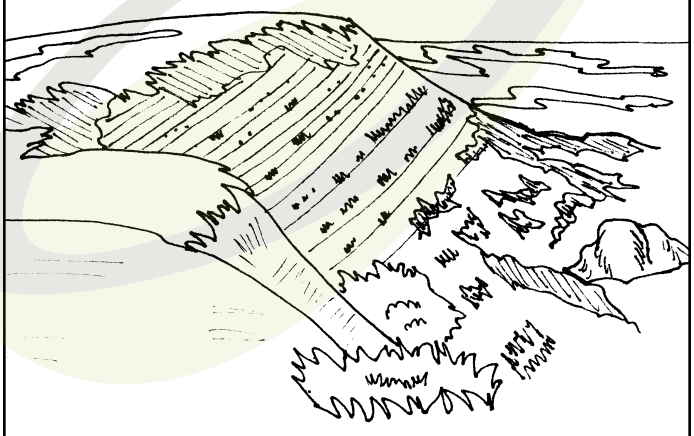


flood plain

This flat area lies on either side of a river, which during times of rising water levels will flood. Later as the water recedes it leaves its deposits here.

flood plain



tableland

This is a fairly extensive plain that drops off suddenly on one side to a much lower area. Also called a plateau, when eroded these will eventually leave a mesa or butte.

tableland

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MRS FERG chart

If something is alive, it can do most of the following:

Move on its own

Respire (breathe)

Sense things in its surroundings or environment

Feed or nourish itself

Excrete

Reproduce itself

Grow

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Examples of arctic animals

Small animals	Large animals	Birds	Insects
snowshoe hare	elk	arctic tern	nose botfly
lemming	caribou	willow ptarmigan	arctic bee
arctic fox	wolf	snowy owl	willow gallfly
short-tailed weasel	polar bear	puffin	woolly bear caterpillar
arctic ground squirrel	musk ox	eider duck	

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Adaptations of some arctic animals

Animal	Physical Adaptation	Behavioral Adaptation
polar bear	insulation: fur and fat	hibernates
caribou	insulation: fat, fur under hooves hooves: wide, sharp concentrates urine	migrates
willow ptarmigan	color change insulation: feathers	dives into snow
snowshoe hare	color change insulation: fur	
nose botfly		over-winters inside caribou
arctic bee	fur	shivers flight muscles

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