

## Master List of GYSTC Activities 11/7/2022

	Title	Discipline	Description
1	100 Button Countdown	Math	A game where players roll dice, add numbers, and pull buttons
2	A Timely Riddle	Math	A fun riddle with numbers
3	Acceleration	Phy Sci	Running experiments with acceleration
4	Add Across 3 by 3	Math	A game where participants draw 3 cards and add them together
5	Air Pressure - Lift a Friend	Phy Sci	Airbag to act as a lifter
6	Angle of Reflection	Phy Sci	Measuring the angle of reflection
7	Animal Life Cycles	Life Sci	Observing the life cycle of many animals using a chart and picture cards
8	Animal Scramble	Life Sci	Matching adult animals with baby animal cards
9	Arrow Illusions	Phy Sci	Observe various visual optical illusions
10	Atomic Structure of Atom (Cereal)	Phy Sci	Make an atomic model using Tricks Cereal
11	Baking Soda Balloons	Phy Sci	Observe gas production in a balloon using vinegar and baking soda
12	Balloon Hover Craft	Phy Sci	Force of Air lifting an object / Friction
13	Balloon into a Flask using Air Pressure	Phy Sci	How Air Pressure can draw a balloon into a flask - relates to weather
14	Balloon Rocket	Phy Sci	Balloon shooting down a string
15	Battling Integers	Math	Game where players draw cards and multiply then together
16	Bernoulli's Principle: Floating Balls	Phy Sci	Floating Ping Pong Balls and other small spheres
17	Best "Guess-Timate"	Math	Draw a line and estimate the number of beans it takes to cover it
18	Big Cheeze	Math	Game: 3 sets of number cards where the player draws a card, largest wins
19	Binary Code GYSTC 5E	Tech	Making a bracelet with binary code
20	Blooming Flower	Life Sci	Observe the turgor pressure in paper as petal unfolds in water
21	Blow and Go	Math	Activity of estimating distance an object can be blown using a straw
22	Blue Sky Activity	Earth Sci	Demonstration showing why the sky is blue
23	Boiling Water	Phy Sci	Specific Heat and Boiling Water
24	Bouncing Balls	Phy Sci	Measuring the coefficient of elasticity
25	Bouncing Polymer Balls	Phy Sci	Making a soft ball from white glue, borax powder, and corn starch
26	Calculated Story	Math	Fun activity using a calculator to complete a story
27	Calculator Words	Math	Fun activity to complete a list of words
28	Candle in a Jar	Phy Sci	Observe gas expansion and contraction as a result of heat change
29	Car Tag Tangle	Math	Students practice 3-digit multiplication using car tags with 3-digit numbers
30	Change Game	Math	Students subtract card values from a set dollar amount, (\$10.00)
31	Chromatography Flower	Phy Sci	Make a flower using coffee filters and pipe cleaners
32	Chinese Water Dragon Bowl	Sound	Investigate sound produced by vibrations and see nodes and anti-nodes
33	Circumference Sense	Math	Students find round snacks and estimate and calculate their circumference
34	Clay Water Crafts	Phy Sci	Experiment with density of clay in making boats
35	Cleaning Pennies	Phy Sci	Chemical Reactions with vinegar, salt, and copper
36	Clever Compass	Phy Sci	Creating a compass from a magnet and a paper clip
37	Cloud in a Bottle (Pressure)	Phy Sci	Observe condensation of water vapor in air with rapid pressure change
38	Cloud in a Jar - Condensation	Phy Sci	Temperature Change causing condensation
39	Coefficient of Elasticity	Phy Sci	Bouncing Balls and measuring how high they bounce
40	Coin Stacking Battery	Phy Sci	Make a battery from coins and coffee filters
41	Colorful Chromatography	Phy Sci	Separating certain water color markers, food coloring and coffee filters
42	Compound Identification & Key	Chem	Identification of various compounds by using chemical and physical properties

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43	Convection Currents in a Bottle	Phy Sci	Observe hot and cold water currents between bottles
44	Cooling Sodas	Phy Sci	Comparing the rate of cooling using ice, ice water, and crushed ice
45	Cootie Monster Challenge	Phy Sci	Measure the conservation of mass using a cootie monster parts
46	Cross Out	Math	Students practice four operations using dice and cross out card
47	Dancing Raisins	Phy Sci	Observe a slow reaction producing gas using raisins or moth balls
48	Day and Night Venn Diagram	Phy Sci	A diagram to recognize things seen during the day or night
49	Day & Night Wheel	Phy Sci	K and 1st wheel showing day and night
50	Dazzling Divers	Phy Sci	Demonstrate the affect of gas pressure on a diving bell
51	Density and Sp Gr... 9 Layer tower	Phy Sci	Nine different liquids and several solids at different levels
52	Density and Specific Gravity	Phy Sci	Show how different liquids and solids have different specific gravities
53	Density Cups	Phy Sci	Expeiment with density of various materials
54	Diamagnetic Property of Grapes	Phy Sci	Demonstrate how water repels a strong magnetic field
55	Diameter of Atomic BBs	Phy Sci	Détermine the diameter of a BB as one does Atoms and Molécules
56	Alien Pictures to go with key	Life Sci	Fun with keying out an set of alien monsters
57	DNA Extraction : Strawberries	Life Sci	Pulling DNA from Strawberried
58	Drinking Bird - Vapor Pressure	Phy Sci	This shows how temperature and evaporation affect vapor pressure
59	Eensy Weensy Spider	Life Sci	Making an eatible spider using crackers, peanut butter and pretzels
60	Egg Carton Numbers	Math	Match a number in the carton with a number of beans
61	Elephant Toothpaste	Phy Sci	Watching a chemical reaction giving off gas
62	Endothermic Reactions	Phy Sci	Observing and measuring an endothermic reaction using thermometers
63	Equation Quest	Math	Using math operations a playing cards to arrive at a desired result
64	Equilibrium Eagles	Phy Sci	Demonstrating the center of gravity using the shape of an eagle
65	Escape Velocity of a Planet	Phy Sci	Demonstrating the Escape Velocity of a Planet with a balloon and string
66	Family Traits - Heredity of Learned	Life Sci	Determine family traits and determine if heredity or learned
67	Fault Lines Due to Sliding Boundaries	Earth Sci	Demonstration of Fault lines
68	Fire Syringe - Heat of Pressurization	Phy Sci	Demonstrates the Heat of Pressurization
69	Floating Mylar Orbs	Phy Sci	Observe Static Electricity and how it affects Mylar strips
70	Floating Paperclips	Phy Sci	Observe water surface tension and factors that affect it
71	Folding Rocks into Mountains	Earth Sci	Demonstration of mountain formation
72	Forensics Activity - Cookie Bite	Life Sci	Analyze various samples of forensics evidence to determine the guilty
73	Fraction Jack	Math	Students will add card values to get as close to 3 as possible
74	Froot Loops Ratios	Math	Students will separate colors and determine their ratios using tables
75	GlueP	Phy Sci	Making a slime material from white glue and borax power
76	Going Shopping for Toys	Math	Students will shop from a toy list and certain money.
77	Graphite Circuits	Phy Sci	Make various Electric Circuits using a graphite pencil or crayon
78	Guess and Group	Math	Students will draw items, estimate, count, and group in 5s and 10s
79	Guess My Number – Riddles	Math	Students work through a series of clues in solving for a specific number
80	Hammer/Ruler Balancing	Tech	Students will experiment with the center of gravity using a hammer and ruler
81	Harmonic Hangers	Phy Sci	Listen to the pure tone of a hanger suspended with string
82	Homopolar Motor Activity	Phy Sci	Make a homopolar motor from wire, battery, and neodymium magnet
83	Hoop Planes	Engineering	Build and fly a hoop plane observing it flight capabilities
84	Hot Air Balloons	Phy Sci	Observe convection currents and how hot air rises

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85	Humpty Dumpty Together Again	Math	Students take cut shapes from an egg and attempts to make bird shapes
86	Iodine Clock	Phy Sci	Chemical Reaction that is delayed by Vitamin C and Hydrogen Peroxide
87	Island Hand Boiler- Vapor Pressure	Phy Sci	Hand Boiler show how heat causes a liquid to boil
88	Kaleidoscopes of Kazoos	Phy Sci	Making a kazoo from a paper tube and wax paper
89	Killer Straw - air pressure	Engineering	Push a straw through a potato using air pressure
90	Kindergarten – Money	Math	Students gain experience with money, shapes, values, and sides
91	Leaning Tower of Pasta	Phy Sci	Building a tower with marshmallows and pasta
92	Lever - Machines	Phy Sci	Demonstrate the mechanical advantage of a lever
93	Levitating Globe - Magnetism	Phy Sci	A globe rotates and levitates in a magnetic field
94	Levitating Paperclip - magnetism	Phy Sci	Suspend a paperclip using a magnet
95	Levitating Pencils	Phy Sci	Make a base where a pencil will be levitated
96	Light Fountain	Phy Sci	Light following a fiber optic or a stream of water
97	Light Index of Refraction	Phy Sci	Measuring the Index of Refraction as light passes through different medium
98	Liquid Nitrogen Activities	Phy Sci	NOTE - the requesting school must purchase the Liquid Nitrogen on their own!
	Lung Working Model	Biology	Make a working model of a lung and show how it works
99	Magic Bending Water	Phy Sci	Observe how static electricity affects a stream of water
100	Magic Hanging Bottle	Phy Sci	Observe compaction and friction using rice and a pencil
101	Magic Pumpkins	Phy Sci	Optical Illusion of Spinning Pumpkin
102	Magnet Falls Through a Metal Tube	Phy Sci	Magnetic Induction
103	Magnetic Strength	Phy Sci	Measure of Magnetic Strength
104	Make a Light Bulb	Tech	electricity running through pencil lead
105	Marshmallow Fun - Air Pressure	Phy Sci	See a Marshmallow swell
106	Marshmallow Shooter	Phy Sci	Make a marshmallow canon
107	Marshmallow Towers	Math	Students will make shapes from narrow craft sticks, marshmallows
108	Mass of Air in a Balloon	Phy Sci	Demonstrate that Air has Mass
109	Math Unit Blocks	Math	Students will use blocks to observe mathematical operations
110	Math with Cards	Math	Students will use playing cards to practice adding and subtracting values
111	Melting Blocks	Phy Sci	Observe Specific Heat of the melting block and the result
112	Metric Scavenger Hunt	Math	Students will estimate size and distances of objects
113	Mid-Atlantic Ridge and Active Model	Earth Sci	Construct a model of the Mid-Atlantic Ridge showing magnetic floor
114	Mighty Glycerine Bubbles	Phy Sci	Making and observing strong bubbles using glycerine liquid
115	Moon Phase - Oreo Moons	Earth Sci	Moon Phase oreo shapes
116	Moon Phase Activity	Earth Sci	Build a ring to show and demonstrate Moon phases
117	Moon Phase Wheel with cutouts	Earth Sci	Wheel that shows phases and positions of Moon, Earth and Sun
118	Mystery of the Red Cups	Phy Sci	Using a hydrophilic Powder make the water disappear
119	Mystery Tube Activity	Phy Sci	Engaging Activity
120	Name that Friendly Alien	Life Sci	Dichotomas Key to name funny aliens
121	Newton's String of Beads - Inertia	Phy Sci	Demonstration of Interia as beads are pulled from a jar
122	Nuclear Chemistry- Radiodating	Phy Sci	Activity to radiodate samples give geiger counters with specific counts
123	Number Squares Brain Game	Math	Students solve math puzzles resembling Suduko
124	Ocean Animal Sorting	Life Sci	Sort Marine Life sheets
125	Ocean Depth Pressures	Earth Sci	Demonstrate water pressure by punching holes in the side of a bottle
126	Oobleck	Phy Sci	Properties of Matter

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127	Optical Density of Water Beads	Phy Sci	Watching water beads disappear in water
128	Oscillating Oceans	Earth Sci	Observe convection currents using water, food coloring, and ice
129	Palm Pipe Music	Sound	Investigate sound produced in closed pipes and making music with them.
130	Palm Pipe Productions GYSTC 5E	Sound	Experiments with sound and frequency
131	pH of Substances using Cabbage	Phy Sci	Cabbage Dye pH indicator test
132	Physical and Chemical Change	Phy Sci	Conducting a number of activities to determine physical and chemical changes
133	Ping Pong Ball Catapult	Engineering	Ping Pong Catapult
134	Plasma - the 4th State of Matter	Phy Sci	Observe and investigate the 4th State of Matter
135	Plastic Rings Suspended by Static	Phy Sci	Cut rings from Grocery Produce Bag and suspend with Static Electricity
136	Polygon Picasso	Math	Students will use various shapes to create a work of art
137	Popping Bubbles	Phy Sci	Observe the colors of light off the top of a bubble as it prepares to pop
138	Popsicle Stick - Potential Energy	Tech	flying sticks
139	Positively Perimeter	Math	Students will determine the perimeter of objects using units like pretzels
140	Powerful Paper Bridges	Engineering	Students will design and build a paper bridge to hold weights
141	Pulley Experiments	Tech	Experiment with pulleys and weights
142	Puzzling Toothpicks	Math	Students will solve toothpick problems
143	Reflections on Geo-Panes	Math	Students will create 3-dimensional shapes using tooth picks and marshmallows
144	Resonating Tuning Forks	Sound	Resonating Tuning Forks and Fork Horns
145	Robot Hand Challenge	Engineering	Students will design and build a robot hand out of straws, string, and paper cup
146	Rock Cycle	Earth Sci	Make and observe rock cycle using crushed crayons and heat plate
147	Rocket Power GYSTC 5E	Phy Sci	film cannister rocket tubes with vinegar and baking soda
148	Roller Coaster Design	Phy Sci	Design and build a roller coaster using the Engineering Design Model
149	Rolling Soda Can with Static Elect	Phy Sci	Charge a balloon and push a soda can without touching it across a floor
150	Sea Turtle Sort	Life Sci	Key to name sea turtles
151	Shake, Shake, Shake	Math	Students shake objects in an egg carton, they estimate the slot they will be in.
152	Shape Art	Art	Students will take basic shapes and create art
153	Skittles Math	Math	Students will count skittles, group them, and chart them
154	Slime	Phy Sci	Make Slime
155	Smoke Ring Cannon - Pressure	Phy Sci	Make smoke rings flow across the room
156	Soggy Diapers	Phy Sci	Observe water absorption of various materials
157	Soil Erosion in an Aluminum Pan	Geology	Demonstration of soil erosion
158	Solar Vane - Weight of Light	Light	Using Crookes Radiometer to measure factors of light
159	Sound Lens using CO2 Balloons	Phy Sci	Use gas in balloons to magnify sound
160	Spectroscope - Homemade	Phy Sci	separation of light in to rainbow
161	Speed and Velocity Activity	Phy Sci	activity to measure the velocity and acceleration of balls
162	Speedy Paperclips	Phy Sci	Observe gravity as a set of keys pulls a paperclip through the air
163	Stacking Inertia Dominos	Engineering	See how many dominos you can stack and remove the bottom
164	String Phone Activity	Engineering	Make a string phone and change strings and tensions
165	String Phone Party Line Activity	Engineering	Make a string phone with multiple connections
166	Superhero Coding Game	Tech	
167	Teasing Tangrams	Math	Student will cut out shapes and make certain shapes from them
168	Temperature of Reactions	Phy Sci	Exothermic and Endothermic Reactions
169	Terrible Tsunamis	Earth Sci	Live diorama of a shoreline and wave action



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Georgia Standards of Excellence

S2P2 a,b,c	S8P2 a,b	S8P3 a,b,c		
SKP2 a	S2P2 c	S4P3 a,c	S8P3 b,c	
S4P1 a b c	S8P4 d g			
SKL2 a	S2L1 a,c	S5L1 a		
SKL2 a	S2L1 a,c	S5L1 a		
S4P1 b	S8P4 d			
S8P1 e	S8 P2 d			
S5P1 c	S8P1 c d f			
SKP2 a	S2P2 c	S4P3 a b c	S8P3 b c	
S4E4 a	S6E4 b,d			
SKP2 a	S2P2 a,b	S4P3 a,b	S8P3 a,b,c	
SKP2 a	S2P2 a,b,c	S4P2 a	S8P3 a,b,c	
S1L1 a b	S2L1 b c			
SKP2 a	S2P2 c	S4P3 a		
S8P4 d,e				
S2P1 c	S3P1 a	S6E4 b	S8P2 c d	
SKP2 a	S2P2 c	S4P3 a b	S8P3 b c	
S5P1 c	S8P1 c d f			
SKP2 a	S2P2 c	S4P3 a b	S8P3 b c	
S4E3 a	S5P1 a	S8P1 a,c,d		
S1P1 d	S4P2 a	S8P4 f		
S8P1 c				
SKP2 a	S2P2 c	S4P3 a b	S8P3 b c	
S1P2 a b	S5P3 a b	S8P5 a c		
S4E3 b	S4E4 c	S6E3 b		
S4E3 b	S4E4 c	S6E3 b		
SKP2 a	S2P2 c	S4P3 a b	S8P3 b c	
S5P2 a b	S5P3 a	S8P2 c	S8P5 a c	
S8P1 e	S8P2 d			
S5P1 c	S8P1 c d f			

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S2P1 c	S3P1 a	S6E4 b c	S8P2 c d	
S2P1 c	S3P1 a	S6E4 b c	S8P2 c d	
S2P1 b	S8P1 f			
S4E3 a	S5P1 c	S8P1 b d		
SKE1 a				
SKE1 a,b				
S4E4 b	S6E4 d			
S8P1 c				
S8P1 c				
S8P1 c				
S1P2 a b	S5P3 b	S8P5 a		
S8P1 e				
SKP2 a	S2P2 c	S4P3 a	S8P3 b c	
S7L5 c				
S4E3 b	S4E4 c	S6E3 b		
S2P1 b				
S5P1 c	S7L4 b	S8P1 c,d, f		
S2P1 c	S3P1 a	S6E4 b c	S8P2 c d	
S4P3 a	S8P3 b			
S6E1 a,d	S8P5 a			
S5L2a, b				
S6E5 a d f				
S2P1 a,c	S3P1 a	S8P2 b,c,d		
S5P2 a				
S8P1 c				
S6E5 a d f				
SKP2 a	S2P2 c	S4P3 a b	S8P3 b c	
S5P2 a b	S5P3 a	S8P2 c	S8P5 a c	
S4P3a	S8P3b			
S4P2a	S8P4e			

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S2P1 c	S6E4 b	S8P2 c, d		
S1P1 d	S4P2 a, b	S8P4 d		
S1P2 a. b	S5P3 b	S8P5 a, c		
S4P1 c	S8P4 d			
S4P1 c	S8P4 d			
S7L2				
S5P2 a				
S1P2 a. b	S5P3 b	S8P5 a, c		
S1P2 a. b	S5P3 b	S8P5 a, c		
S3P1 c	S5P2 b			
S3P1 c	S5P1	SPS5		
S5E1	SES2			
SKE1 b	S2E2 d	S4E2 b	S6E2 a	
SKE1 b	S2E2 d	S4E2 b	S6E2 a	
SKP1 a,b	S8P2 a,b	S8P3 a,b,c		



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### Georgia Standards of Excellence

S1P1 d	S4P2 a, b	S8P4 d		
S1P1 d	S4P2 a, b	S8P4 d		
S5P1 a, b, c				
S2P1 c	S7L4 b	S8P1 c,f	S8P2 c	S8P4 b,c
S1P1 d	S4P2 a, b	S8P4 d		
S4P3	S5P1	S8P3		
SKP2 a	S2P2 a	S4P3 b	S8P2 d	S8P3 a, b
S5P2 a				
S5E1 a	S6E5 d, e			
S1P1 a, b	S3P1 a, c	S4P1 a	S8P2 c	S8P4 d
S1P1	S4P2	S8P4		
S4P1 c	S8P4 d			
S1P1 d	S4P2 a, b	S8P4 d		
S1P1 d	S4P2 a, b	S8P4 d		
S8P1 f				

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S4E1 d	S6E1 a, b, c, d			
S5P2 a				
S5P2 a				
S5P2 a				
S5P2 a				
S5P2 a				
S5P2 a				
S5P2 a				
S5P2 a				
S1E1 a,b,c	S4E4 a,b,c,d	S6E4 b,c,d,e		
S1E1 a,b,c	S4E4 a,b,c,d	S6E4 b,c,d,e		
S1E1 a,b,c	S4E4 a,b,c,d	S6E4 b,c,d,e		
S1E1 a,b,c	S4E4 a,b,c,d	S6E4 b,c,d,e		
S1E1 a,b,c	S4E4 a,b,c,d	S6E4 b,c,d,e		
S1E1 a,b,c	S4E4 a,b,c,d	S6E4 b,c,d,e		
S1P1 d	S4P2 a, b	S8P4 d		
S1P1 d	S4P2 a, b	S8P4 d		