

28 STEAM activities with Children's Books

www.nancypenchev.com

@penchevable

nancypenchev@gmail.com

Theme	Activity	Question	Resources	Book
Shake it Up	ziploc ice cream	How long will it take the ingredients to form ice cream? How many shakes until ice cream forms?	https://www.pinterest.com/pin/19978777549365501/ http://science.howstuffworks.com/innovation/edible-innovations/ice-cream3.htm	From Cow to Ice Cream
Don't Crack Up	Egg protectors	The school cook keeps dropping eggs when he brings them from the refrigerator to the stove. How can we make an protection device to save the eggs?	https://www.pinterest.com/pin/19978777549521974/ http://www.sciencekids.co.nz/projects/eggdrop.html http://www.ehow.com/how_7670457_make-egg-protectors.html	Who Pushed Humpty Dumpty
Burn it Up	Solar Ovens	The power is out and we need to cook hotdogs for the class. How can you cook them using the sun?	https://www.pinterest.com/pin/19978777549445832/ http://www.education.com/science-fair/article/design-solar-cooker/	We Need the Sun
Heat	Melted crayon Art	Which heat source would get hot enough to melt crayons and form crayon art?	https://www.pinterest.com/pin/19978777549089351/	My crayons talk

		Materials: flashlight, hotplate, hair dryer, halogen lamp	http://www.instructables.com/id/Melted-Crayon-Art/	
Make It	Maker	What is something you need to live a better life? How can you transform materials into new devices?	http://www.makershed.com/collections/beginner	You wouldn't want to live without fire
What do Cheeseballs and Your Breath have to do with Science	blowing cheeseballs	How can you move the cheeseball to the target using wind power?	https://www.pinterest.com/pin/19978777548850148/ http://www.sciencebuddies.org/science-fair-projects/project_ideas/Aero_p039.shtml	Woosh Said The Wind
Floors	Floors video game building	How can you design a video game?	http://www.projectpixelpress.com/floors/	Who Invented Home Video Games
Towering Over You	Marshmallow Towers	Your challenge is to build the tallest marshmallow FREE standing tower. What is your plan? How successful were you?	https://www.pinterest.com/pin/19978777548939961/ http://knowitall.scetv.org/career_aisle/resources/related/ccjan10/Marshmallow%20Tower%20Activity.pdf	Skyscraper
Oooo yuck	oobleck	What happens when you combine the ingredients? Why? Can you make a similar non Newtonian liquid with other household items?	https://www.pinterest.com/pin/19978777549460662/ http://www.livescience.com/21536-oobleck-recipe.html	Bartholomew and the Oobleck

Blast off	Baking soda rockets	<p>What happens when you combine baking soda and vinegar? How can you make the rocket go farther?</p> <p>film cansisters for sale http://www.amazon.com/Educational-Innovations-Rocket-Film-Cansisters/dp/B00B3VF320</p>	<p>http://www.stevespanglerscience.com/lab/experiments/acid-base-rocket</p> <p>http://sciencebob.com/build-a-film-canister-rocket/</p>	Zoom Rocket Zoom
Can you hear me now	Making a record player	How would you make sound come from the record?	http://turntable-dj.wonderhowto.com/how-to/make-your-own-home-made-record-player-175535/	Ah, Music
It's In The Stars	marshmallow constellations	Why do the stars form patterns?	http://www.kcedventures.com/blog/astronomy-activities-for-kids-books-about-the-stars	Our Stars
Will it melt?	gummy bear science and math	Will different liquids affect the size, shape, and feel of gummy bears?	<p>https://www.pinterest.com/pin/119978777548930805/</p> <p>http://tinkerlab.com/incredible-growing-gummy-bears/</p>	Gummy bear counting book
Will it float?	making boats	How can you make a floating vessel? How many items will the vessel hold until it sinks?	<p>https://www.pinterest.com/pin/119978777548961975/</p> <p>http://kidsactivitiesblog.com/56539/boat-crafts-kids-make</p> <p>http://www-tc.pbskids.org/fetch/parentsteachers/activities/pdf/FETCH_FloatMyBoat_AG.pdf</p>	Monster Ships

Will it fly?	straw airplanes	How can you create a flying object using the materials provided?	https://www.pinterest.com/pin/19978777548980346/ http://sciencebob.com/the-incredible-hoop-glider/	Tell me why planes have wings
Crystals	borax crystals	What reactions in the ingredients cause crystals to grow?	https://www.pinterest.com/pin/19978777549522024/ http://chemistry.about.com/od/growingcrystals/	Growing Crystals
Don't Let it Fall	Math Jenga	What blocks will be removed that will make the tower still stand?	https://www.pinterest.com/pin/19978777549518616/ http://www.minds-in-bloom.com/2011/09/free-jenga-multiplication-and-addition.html	The Man Who Walked Between Towers
Roar!	Coding	What commands will make the dinosaur move and complete the tasks?	Daisy the Dinosaur APP https://itunes.apple.com/us/app/daisy-the-dinosaur/id490514278?mt=8 https://www.pinterest.com/pin/19978777549521912/	Dinosaurumpus
Roll it	Picasso painting with math	What is most likely and least likely to be rolled?	https://www.pinterest.com/pin/19978777549462849/ extension: https://www.nsa.gov/academia/_files/collected_learning/elementary/arithmetric/place_value_and	Picasso

			_picasso.pdf	
Mola!	Mola Art with shapes	How can you use color and depth to create art?	https://www.pinterest.com/pin/19978777549445647/ http://kidworldcitizen.org/2012/01/01/create-a-mola-folk-art-from-panama/	Biblioburro
Seuss-tacular	math with Dr Seuss	What math skills are you the best at?	https://www.pinterest.com/pin/19978777549409781/ https://www.pinterest.com/pin/19978777549317764/ online games: http://pbskids.org/catinthehat/games/math-safari.html	choose
an inch or more?	measuring with nonstandard measurement	How does measuring with non standard instruments cause a problem?	https://www.pinterest.com/pin/288160076127766395/ http://www.pbs.org/parents/adventures-in-learning/2014/07/measuring-kids-steps/ video: http://pbskids.org/video/?guid=46479480-05d4-4374-a39a-9e8c4a522168	How Big Is A Foot
Did you hear that?	echolocation	How do your senses affect other senses?	blindfold bean bag toss bat activity	Nightsong
Do you smell that?	smell	What smells are easiest to	hidden smells	David Smells

		identify? If you close your eyes, what happens to your sense of smell?	http://www.education.com/activities/article/your_nose_knows_kindergarten/	
Do you see that?	Numbers at our school movie	What numbers do you see most?	http://www.scholastic.com/teachers/lesson-plan/movie-making-classroom APPs: PerfectVideo, Educreations	Hidden Alphabet
picture this!	Picture books	How can you create a book using technology?	poster making with APPs: phonto, pic collage http://www.scholastic.com/teachers/lesson-plan/100-ways-use-digital-cameras	Click! A Book about Cameras and Taking Pictures
How far is it?	planets	How far away are planets from the sun? What does that mean for the planet?	https://www.pinterest.com/pin/284500901436716084/ http://www.kidsastronomy.com/the_planets.htm	Every Planet has a place
Are you a lump of clay?	claymation	How can you create a movie using clay?	https://www.pinterest.com/pin/119978777549521987/ http://www.tech4learning.com/userfiles/file/pdfs/Frames/Making_Claymation_in_the_Classroom.pdf	Action! Making Movies (Time for Kids)