



CONTROL CENTRAL

PODDLEVILLE

ECO-HAVEN

TIKKIVILLE

GRIM WREAKER

ENTRY PORTAL

Family Patterns

ID Theft

Whodunnit?

Shape Shadow Theater

Mayan Mystery

Dragon Dilemma

Icky's Hidden Treasure

Matter of Chance

Restore Power

Cyber Cycle

Symmetria Factory

Road Repair

Find Hacker

Stop Launch

Tenting

Cyberchase Activities

	Activity	Description	Topic	Number & Operations	Algebra	Geometry	Measurement	Data Analysis & Probability	Process Standards
1	Cyber Quests	Children complete Cyberchase Quests. The Quests lead children through the exhibit, and encourage them to look for additional clues and challenges. Aimed at children ages 9-12.	Varies	X	X	X	X	X	X
2a	Bugs in the System	One or more children use existing Cyberchase web games to explore: Bar graphs Liquid volume; problem solving Inverse operations Logic	Bar Graph					X	X
2b	Pour to Score		Volume	X			X		X
2c	Eye of Rom		Inverse Operations	X					X
2d	Logic Zoo		Logic		X				X
3	Restore Power	Hacker has removed the the power circuits needed to keep Control Central running. To restore the power, children reinsert combinations of fractions to fill the empty slots. There are a number of possible solutions. Children can place the rods on the equivalence chart to compare fractions before placing them on the board. Children will need to find combinations of rods that can fill in: $1\frac{1}{2}$, $1\frac{1}{4}$, 1 , $\frac{1}{2}$, $\frac{3}{4}$, $\frac{2}{3}$, $\frac{5}{6}$.	Fractions to Percents	X			X		X
4	Cyber Cycle	Children push pedals or hand crank to add their kid-power to Motherboard's reserve "battery." Each push of the pedal counts as one power unit. Children can enter increments of 100 pushes up to 1,000. The overall goal is to reach 1,000,000.	Number sense	X					X

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5	Find Hacker	Hacker is hiding out somewhere in Cyberspace. Visitors view a large map of Cyberspace and use a series of clues to eliminate possible hiding places to find Hacker. There are multiple scenarios, increasing in difficulty.	Problem solving					X	X
6	Stop the Launch	Hacker has locked the controls and set the timer. When it goes off, a rocket full of Magnetite, aimed at Control Central will launch, erasing Motherboard's memory forever—unless, that is, children find the combination of switches and levers to deactivate the launch. Children can work individually, or together to find the correct combinations at three stations. Three stations represent different degrees of difficulty.	Combinations					X	X
7	Flip, Rotate, Fit It In	Buzz and Delete have been given an ultimatum by Hacker, organize the Wrecker's closet—or else. Children “organize” the closet on the Grim Wrecker by fitting the variety of shapes into one, or both, of the closets. Since there is no “right” side, the shapes can be flipped and rotated to fit.	Spatial Reasoning			X			X
8	Wigging Out	Hacker wants to find the perfect storage container for his wig gels. Visitors are asked to determine which of three containers will hold the largest number of wig gels.	Estimation	X		X			X
9	Poddle ID w/See-Saw	Hacker has erased the Poddles' numeric identities. Luckily, their identity equals their weight. Children use the weights to balance each Poddle on the pan scale to determine their identity (number). Once children find a Poddle's number, they put it into the appropriately numbered “cubby.” Additionally, children can experiment with balancing weights and Poddles on a see-saw.	Equivalencies; Weight		X		X		X

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10	Podling Family Patterns	It's time for the big Podling Match Up. Before they hatch, Podlings must be matched to their new family. Since Poddle families are one big "happy pattern," to find which Podling goes with each family, visitors must "solve" the pattern by choosing the Podling egg that represents the next "family member" from the bassinet, and place it in the indentation next to the family.	Solving patterns		X				X
11	Poddleville Lineup (2 stations)	There has been a crime wave in Poddleville. Police have suspects, but they don't know who is guilty. Children view the suspects in the line up and compare their shadow with the witness descriptions. They can place the shapes on a mount, and switch between three light sources to reveal different angles on their suspects.	Point of View			X			X
12	Bank Shot	Visitors tryout for the Penguin Hockey League by dodging icebergs to hit the goal.	Bouncing; Angles			X	X		X
13	Rebuild a City	To protect an ancient city from destruction, Professor Archimedes has changed an ancient city into two dimensional shapes. Visitors combine the shapes in a variety of configurations to rebuild the three dimensional shapes: cubes, pyramids, and multi-angled shapes. They can configure their shapes to match the printed illustrations of "nets," or experiment with building their own three-dimensional shapes.	2D/3D shapes			X			X
14	Kahuna-huna Race-a-run	Hacker has removed vital pieces of the track for Tikkiville's Mini Prix Race. Visitors must rebuild the track before the race can begin. Children use sections of track marked in tenths to "repair" the racetrack. Children can measure the tracks against a printed rule, also marked in tenths, to see if the pieces add up before they place them. When the track is complete they can "race" cars along the track.	Decimals	X			X		X

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15	R-Fair City	Madam Incognita (aka The Hacker) beckons children to “come play R-Fair City’s newest game—there’s a winner everytime.” The problem is that the slots marked for Hacker seem to be winning most of the time. Children determine why the wheel isn’t fair, and then set up another wheel that is fair.	Probability					X	X
16	Dragon Dilemma	Master Pi challenges children to use their problem solving skills. Two children can play the Dragon Dilemma at a time. Fourteen green dragons and one red dragon are moved to the center of the circle. The players take turns removing 1, 2, or 3 dragons at a time. Whoever is left with the red dragon, loses that round.	Problem solving		X				X
17	Jimayan Mystery	Hacker has hidden the ancient Jimayan statue of Jaguara, a mystical source of peace and happiness, inside the temple wall of Eco-Haven. Children use the imprinted Mayan numbers 1-20 as a guide to find the correct sequence of numbers on the grid of twelve tiles. They must order them from the lowest number to the highest number. When visitors press them in the correct order the statue rises dramatically.	Numeration; Codes	X	X				X
18	Playing w/Patterns	Children create musical patterns, or recreate popular Latino or English songs, by placing wooden balls on a horizontal gridded platform that corresponds to a full scale. As they turn a crank, the platform “dumps” the balls onto xylophone blocks.	Pattern sequences		X				X