## SPARK Academy at Cowart 2019-2020 SPARK Lab Overview by Topic



	Kindergarten	First Grade	Second Grade	Third Grade
Grow Lights		Sept: Lettuce (2 varieties) Oct: Kale (2 varieties)	Jan/Feb: Brassica and student designed experiments Mar: Pollinator plants	
Hydroponics		Oct: Lettuce (2 varieties) Nov: Kale (2 varieties)	Feb: Student designed experiments	
Outside Garden	(Summer: pumpkins)	Oct: Lettuce and Kale (2 varieties) May: Sunflowers	Oct: Winter Wheat Apr: Pollinator plants	
Bee Bot	Mar: Gingerbread Man retell	Dec: Human Robots and Animal Enclosures	Jan: Transparent/ Translucent/ Opaque	
Dash	Dec: Push/Pull with Go app	Jan: Puzzlets: movement and lights Jan: Blockly: movement and lights April: Xylo and Blockly: sound	Oct: Explore and code cave expedition to retrieve trash left behind in cave - mapping and coding	Apr: Launcher Competition
LEGO WeDo		May: Milo sounds	Oct: Milo - explore cave and locate trash, leading into Dash	Dec: Drop and Rescue

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3D Printing	Dec: Ornaments with pens	Feb: Constellations with pens	Dec: Ornaments with symmetry Apr: Containers with pens	Aug: Nametags Jan: Hybrid animal, fill in with pens
Science	Sept: Shape decomposition, scientific drawing Oct/Nov: Forces and Motion, fair tests Nov: Zoo prep and reflection Feb: Float and sink	Oct: Animal Zoo Enclosures Feb: Constellations March: Kites	Sept: Solution Caves Feb: Plant experiments, control vs experimental Mar: Kites, prediction/ observation/ conclusion	Sept: Hurricanes Nov: Severe Weather Preparation Jan: Ecosystems Feb: Bird houses Mar: Kites Apr: Forces of Motion
Engineering	Jan./Feb: Gingerbread Man boats Apr: Sun shelters (UV beads)	Sept: Keeping Goldieball OUT! Nov: Wild Feet (hand2mind)	Nov: Catapults Feb: Hand Pollinators	Oct: Roof Design Challenge
PBL	Oct: Protect the Pumpkin	Support classroom PBLs in Dec/May	Oct.: Caves Feb: Hand Pollinators	Sept: <u>Hurricane</u> !
Success Skills	Aug: Taking turns/Stations			