



ALVIK

CURRICULUM GRID

INFORMATICS - IT LICEO  
SCIENTIFICO / ISTITUTO  
TECNICO - SETTORE  
TECNOLOGICO

LESSONS	LEARNING GOALS	ELEMENTARY NGSS	ELEMENTARY CSTA	CODING AND ROBOTICS CSTA 11-14	CODING AND ROBOTICS CSTA 14+	
ALL	Use <b>correct terminology</b> , describe steps taken and choices made during the <b>iterative process</b> of program development.		1A-AP-15 1A-CS-03 1B-CS-01		3B-AP-23	✓
<b>THERE AND BACK AGAIN OBBY COURSE PERIMETER SCOUT NEED...MORE...POWER</b>	Make observations and/or <b>measurements of an object's motion</b> to provide evidence that a <b>pattern</b> can be used to predict future motion.	3-PS2-2	1A-DA-07			
<b>ROBOT DOZER</b>	Use <b>flowcharts</b> and/or <b>pseudocode</b> to address complex problems as <b>algorithms</b> .		1A-AP-08 1A-AP-09 1B-AP-13	2-AP-10 2-AP-16	3B-AP-09 3B-AP-10 3B-AP-13	✓
ALL	Design projects that <b>combine hardware and software components</b> to <b>collect and exchange data</b> .		1B-CS-01 1B-CS-02 1A-CS-03	2-CS-02	3B-CS-02	✓
ALL	Create clearly named <b>variables</b> that represent <b>different data types</b> and <b>perform operations</b> on their values.	3-5-ETS1-3	1B-AP-09 1A-DA-06 1A-DA-07	2-AP-11	3A-AP-18	✓
<b>THERE AND BACK AGAIN PERIMETER SCOUT SMART HIGHWAY ESCAPE ROOM</b>	Analyze data to <b>determine</b> if a <b>design solution works</b> as intended.	K-PS2-2 K-2-ETS1-1 3-5-ETS1-2 3-5-ETS1-3	1B-AP-16 1B-AP-17 1B-DA-07	2-AP-13 2-AP-15 2-AP-17 2-AP-19	3A-AP-16 3A-AP-18 3A-AP-22 3B-AP-21	✓
ALL	<b>Develop programs</b> with sequences and simple <b>loops</b> , to express ideas or address a problem.		1A-AP-10 1B-AP-12 1B-AP-13 1B-AP-17	2-AP-14 2-AP-16	3A-AP-14 3B-AP-16 3B-AP-20	✓
ALL	Test and <b>debug</b> (identify and fix errors) in a program.		1A-AP-14 1B-AP-15 1B-CS-03	2-AP-19	3A-AP-21 3B-AP-23	✓
<b>FOLLOW THE LEADER COLORFUL REACTIONS ROBOT DOZER</b>	<b>Simplify solutions</b> , generalize computational problems, i.e using <b>lists</b> , arrays, etc	K-2-ETS1-1	1A-AP-11 1B-AP-11 1B-CS-03 1B-AP-12	2-AP-14	3A-AP-14 3A-AP-15 3A-AP-17	✓
<b>WALK THE LINE</b>	Combine control structures, including nested loops and compound <b>conditionals</b> .		1B-AP-10	2-AP-12	3B-AP-23	✓
ALL	<b>Increase the capabilities of a robot</b> : create complex programs, designed as <b>systems of interacting modules</b> , each with a specific role, coordinating for a common overall purpose.		1B-CS-01 1B-DA-07		3B-AP-14 3A-AP-18	✓