

Dobot Unit 1

Curriculum

Next Generation Science Standards (NGSS)

International Society
for Technology in Education (ISTE)

Common Core

Introduction Lesson: Dobot Introduction and Exploration Lesson

Lesson 1: Ratios & Proportions – Compare and draw the Earth, Moon & Sun!

Lesson 2: Wave & Engineering – Use Gummy Bears to learn about Light Waves!

Lesson 3: 3D Printing Physics – Newton's 3rd Law, Demolition Derby Style!

Lesson 4: Suction Cups & Magnets – Learn about the powers of Magnetism!

Lesson 5: Laser Engraving – Construct your own Passive Solar House!

****Lessons written for 45-60 minutes**

NGSS

HUMAN IMPACTS

MS-ESS3-2
MS-ESS3-3
MS-ESS3-4

STRUCTURES & PROPERTIES OF MATTER

MS-PS-1
MS-PS1-3
MS-PS1-4

CHEMICAL REACTIONS

MS-PS1-2
MS-PS1-5
MS-PS1-6

FORCES & INTERACTIONS

MS-PS2-1
MS-PS2-2
MS-PS2-3
MS-PS2-4

ENERGY

MS-PS3-1
MS-PS3-2
MS-PS3-3
MS-PS3-4
MS-PS3-5

WAVES & ELECTROMAGNETIC RADIATION

MS-PS4-1
MS-PS4-2
MS-PS4-3

ENGINEERING DESIGN

MS-ETS1-1
MS-ETS1-2
MS-ETS1-3
MS-ETS1-4

COMMON CORE

MATH

*Ratios & Proportional Relationships

CCSS.MATH.CONTENT.6.NS.C.5

*Expressions & Equations

CCSS.MATH.CONTENT.7.EE.B.3

*Number System

CCSS.MATH.CONTENT.6.NS.C.5

ENGLISH LANGUAGE ARTS

*WRITING

CCSS.ELA-LITERACY.WHST.6-8.1.A
CCSS.ELA-LITERACY.WHST.6-8.7

*READING: INFORMATIONAL TEXT

CCSS.ELA-LITERACY.RI.7.1
CCSS.ELA-LITERACY.RI.7.2

*SCIENCE & TECHNICAL SUBJECTS

CCSS.ELA-LITERACY.RST.6-8.3

ISTE

Empowered Learning

1a-d

Knowledge Constructor

3a-d

Innovative Designer

4a-d

Computational Thinker

5a-d

Global Collaborator

7a,c

