

Science

DNA Extraction

Students use a variety of substances including dish detergent, salt, water and isopropyl alcohol to release the DNA from the nucleus of a strawberry. The Human Genome project and the medical importance of mapping all the possible DNA sequences is discussed.

This and other design challenges, connected to the NJSLS and NGSS, are available for your classes. Please contact your school's STEM Specialist.



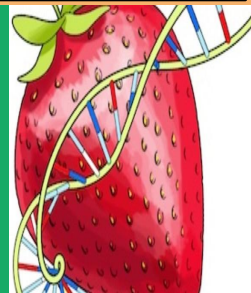
Step
Into

STEM



Science • Technology • Engineering • Math

5d



Mathematics

Planner 5d

Students work in pairs using the Planner 5d website to create a unique space. Each team has a generous budget of \$50,000 that must be recorded on a Google Spreadsheet. Upon completion, students share the link to their design and communicate their work to their classmates.

Middle School STEM Specialists

Bayshore
JoAnn Layton
X 2610

Thompson
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iD Tech Camps and Academies

Day and overnight STEM camps are available this summer for middle school students. Summer courses available to students include coding, game design, robotics and 3D modeling/printing

<https://www.idtech.com/>



STEM Survey

The STEM Specialists have developed a survey for Math and Science teachers to gather valuable input to the current program. Please try to take a few minutes to complete the survey so we can better implement STEM at the middle school level.



Year End/ Beginning of the Year Team Building Ideas

The following links provide team building challenges with minimal supplies and preparation:

Pom Pom Cannon-
<http://starfisheducation.com/the-brown-bag-stem-challenge-pom-pom-cannon/>
Building Windmills-
<http://starfisheducation.com/the-brown-bag-stem-challenge-building-windmills/>
Lunar Landers-
<http://starfisheducation.com/the-brown-bag-stem-challenge-lunar-landers/>

Engineering Resources Spotlight

[Six Characteristics of a Great STEM Lesson](#)

[STEM Lessons from Space](#)

[19 Math STEM Activities for Middle School](#)

