

# Scout:



## Hang On!

This module is designed to help you explore how engineering affects your life each day.

1. Choose A or B or C and complete ALL the requirements.		
A. Watch about three hours total of engineering-related shows or documentaries that involve motion or motion-inspired technology. Then do the following:		
(1) Make a list of at least two questions or ideas from each show.		
(2) Discuss two of the questions or ideas with your counselor.		
B. Read (about three hours total) about motion or motion-inspired technology. Then do the following:		
(1) Make a list of at least two questions or ideas from each article.		
(2) Discuss two of the questions or ideas with your counselor.		
C. Do a combination of reading and watching (about three hours total). Then do the following:		
(1) Make a list of at least two questions or ideas from each article or show.		
(2) Discuss two of the questions or ideas with your counselor.		
Date		Completed A, B or C
2. Choose ONE STEM field of interest from the following list that you have not completed (Archery, Aviation, Composite Materials, Drafting, Electronics, Engineering, Inventing, Model Design and Building, Railroading, Rifle Shooting, Robotics, Shotgun Shooting). Complete ALL the requirements for a Venturing STEM exploration in that field.		
Date		Field
3. Do ALL of the following:		
A. Make a list or drawing of the six simple machines.		
B. Be able to tell your counselor the name of each machine and how each machine works.		
C. Discuss the following with your counselor:		
(1) The simple machines that were involved with the motion in your chosen STEM exploration		
(2) The energy source causing the motion for the subject of your STEM exploration		
(3) What you learned about motion from doing the STEM exploration		
Date		
4. Choose A or B and complete ALL the requirements.		
A. Visit an amusement park. Then discuss the following with your counselor:		
(1) The simple machines present in at least two of the rides		
(2) The forces involved in the motion of any two rides		
B. Visit a playground. Then discuss the following with your counselor:		
(1) The simple machines present in the playground equipment		
(2) The forces involved in the motion of any two playground fixtures		
Date		Completed A or B
5. Do the following:		
A. On your own, design one of the following and include a drawing or sketch: an amusement park ride OR a playground fixture OR a method of transportation.		
B. Discuss with your counselor:		
(1) The simple machines present in your design		
(2) The energy source powering the motion of your creation		
Date		
6. Discuss with your counselor how engineering affects your everyday life.		
Date		