

MATERIALS FOR BMX BIKE PEDAL

STUDENT NAMES:

Students shall complete the following steps in order to analyze the advantages or disadvantages of using different materials for bike pedals in the manufacturing industry.

- 1- First, let's get familiar with a general classification of materials used in manufacturing. See list below:

Metals and Metals Alloys (i.e. silver, aluminum, steel)

Polymers (i.e. plastics, rubber, wood)

Ceramics (i.e. mica)

Composites (i.e. fiber composites)

Others (i.e. semiconductors, biological inspired)

- 2- From the list presented in item 1, there are several types of materials that may be used for the manufacturing of bike pedals. The team will research and analyze some advantages and disadvantages of using specific types of materials (use parameters such as mechanical properties, cost, durability, etc). **Complete table below.**

MATERIAL	ADVANTAGES	DISADVANTAGES	ADDITIONAL NOTES	
PLASTIC/NYLON COMPOSITE				
ALLUMINUM ALLOYS				

Note: List all references