

تم تحميل هذا الملف من موقع المناهج الإماراتية



*للحصول على أوراق عمل لجميع الصفوف وجميع المواد اضغط هنا

<https://almanahj.com/ae>

* للحصول على أوراق عمل لجميع مواد الصف الثاني عشر اضغط هنا

<https://almanahj.com/ae/12>

* للحصول على جميع أوراق الصف الثاني عشر في مادة تصميم ولجميع الفصول, اضغط هنا

<https://almanahj.com/ae/12design>

* للحصول على أوراق عمل لجميع مواد الصف الثاني عشر في مادة تصميم الخاصة بـ الفصل الأول اضغط هنا

<https://almanahj.com/ae/12design1>

* لتحميل كتب جميع المواد في جميع الفصول للـ الصف الثاني عشر اضغط هنا

<https://almanahj.com/ae/grade12>

للتحدث إلى بوت المناهج على تلغرام: اضغط هنا

https://t.me/almanahj_bot

حل ديزاين CREATIVE
إعداد وتقديم نوف الحضرمي

الاشتراك : بنت الشامسي
وأعضاء قنوات أخرى في تلجيرام
كل الشكر والجزيل لهم

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Figure 1.1

Activity 1.1:

Highlight or circle keywords and phrases in the brief. This will help to break down the design one step at a time. List five of these keywords below and describe their meaning.

Keyword	Meaning
Mission	an important assignment carried out for political, religious, or commercial purposes, typically involving travel.
exploration	the action of traveling in or through an unfamiliar area in order to learn about it.
space Rover	a space exploration vehicle designed to move across the surface of a planet or other celestial body.
sustainable	everything that meets the needs of the present without affecting.
Rocker-bogie	a unique suspension system used in space bays to evenly distribute load and to tackle uneven terrain.



Figure 12

Show your understanding of the brief. In your own words, clearly describe what is being asked for in it.

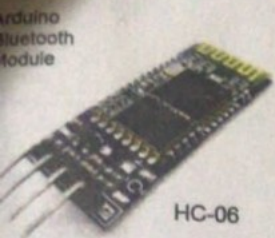
.. We are asked to design a Space Rover and contribute to ..
 .. the Emirates Mars Mission. The space rover must be able to ..
 .. climb and move left and right. It should be controlled wirelessly ..
 .. using Bluetooth. It should also contain 6 wheels. We should ...
 .. research and sketch a design, then design it in Fusion 360 ...
 .. and then 3D print using Flash printer ..

.....

Activity 1.3

List types of...

Activity 1.3: Create a research page or mood board using both sketches/images and text to explain your research. An example is shown below.



HC-06

Figure 1.4

Activity 1.3:

What electronic components are required? One essential component is the HC-06 Bluetooth chip to transfer wireless signals to Arduino.

- * What Features should my design contain?
 - used a renewable energy, for example: solar wind, dry battery - Reliability - compactness - Robotic arm
 - Astorage room - Non-wheeled approaches - High quality
- * What materials are suitable for my design?
 - Glass - Aluminum - wires - Copper - plastic - Iron
- * What size / scale should my design be?
 - Not big
 - height: 9m
 - width: 4m
 - length: 6m
- * What suspension systems are used?
 - steel leaf springs
 - shock absorber
 - coil springs
 - Bogie - hydraulic - pegasus system - conventional (6) wheel
 - Multi wheel (60 m)
- * What electronic components are required?
 - Arduino Bluetooth module. (add more)
 - Cameras Lesers - Antenna - solar panel - worm
 - Material Adherence Experiment
 - Rocker Bogie Mobility system Bot

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Figure 12

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Activity 1.1:

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Figure 11

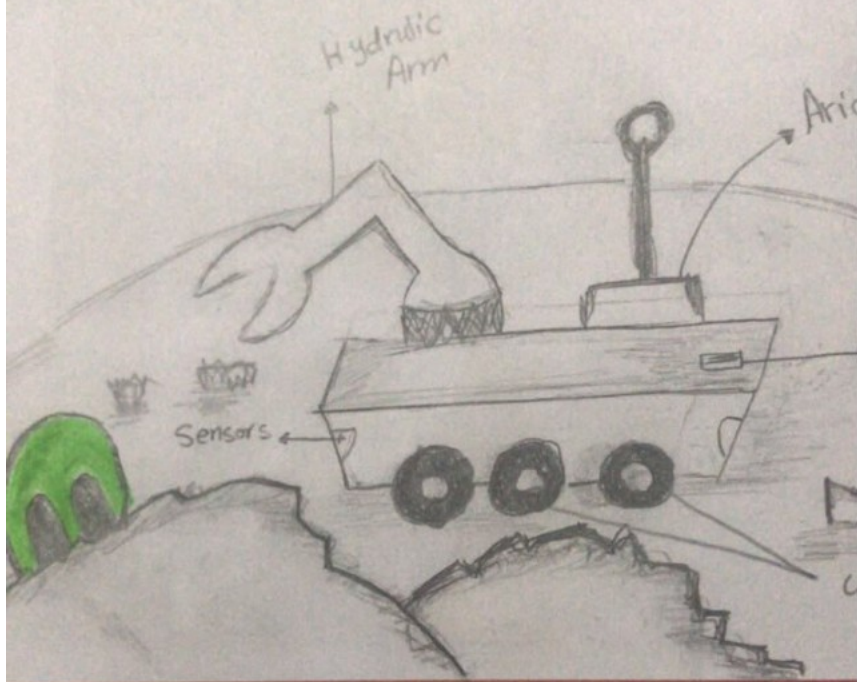
Keyword	Meaning
Mission	an important assignment carried out for political, religious, or commercial purposes, typically involving travel.
exploration	the action of traveling in or through an unfamiliar area in order to learn about it.
space Rover	a space exploration vehicle designed to move across the surface of a planet or other celestial body.
sustainable	every thing that meets the needs of the present without affecting.
Rocky-bog'ie	a unique suspension system used in space kits to evenly distribute load and to tackle uneven terrain.



for each design: extra

DESIGN IDEA 1

Activity 1.4:



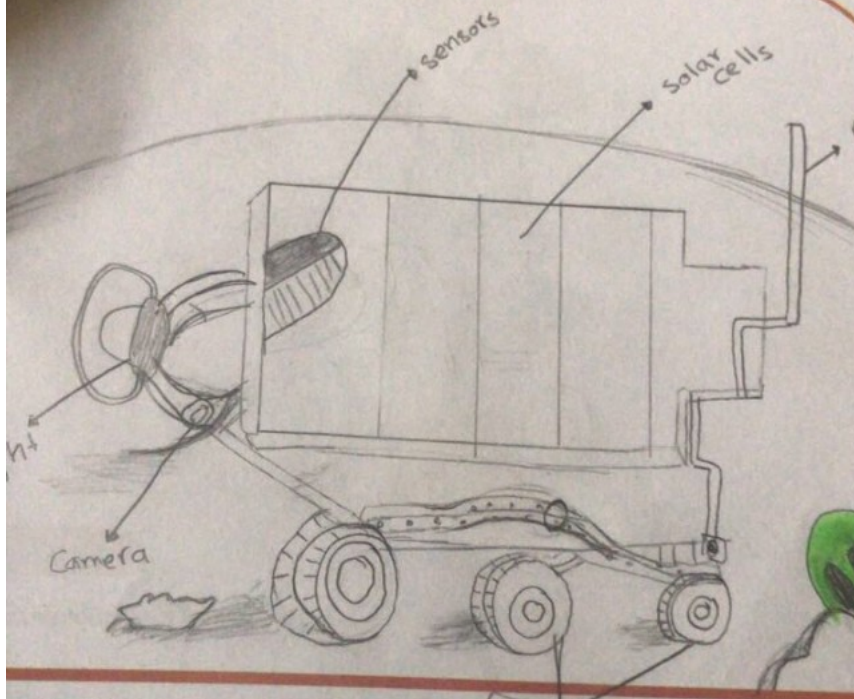
Advantages:

- ① Moves Past
- ② Small vehicle

Disadvantages:

- ① The hydraulic arm can't round 360°
- ② The dial signal is slow
- ③ There is no camera

DESIGN IDEA 2

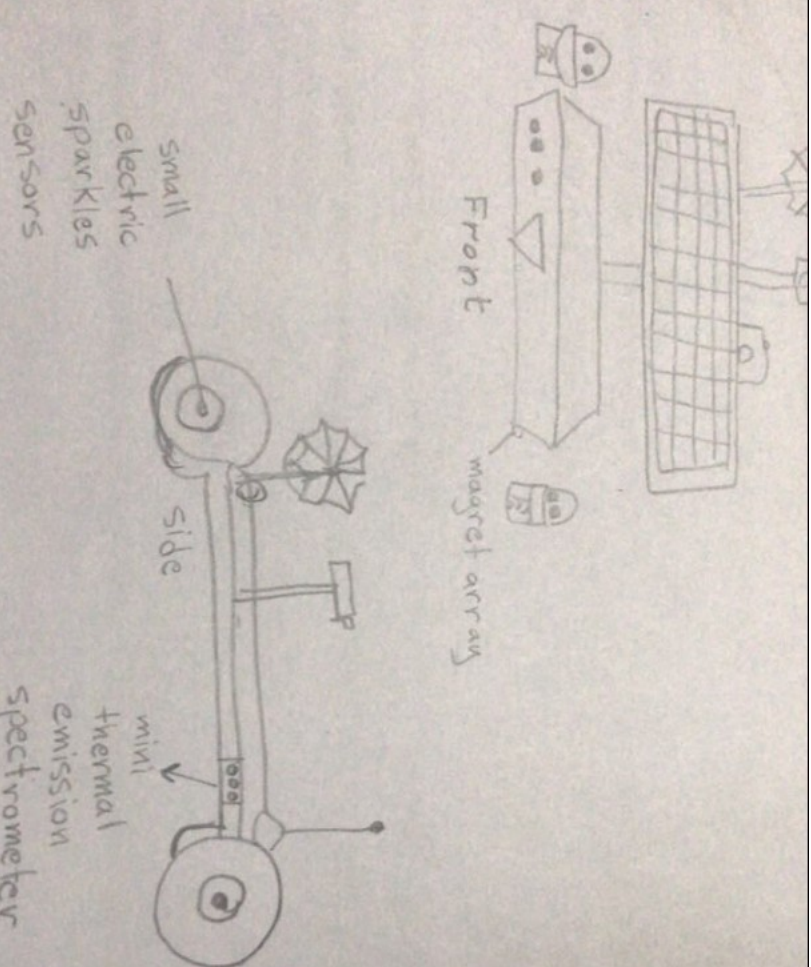


Advantages:

- 1. The light lights Mars at night.
- 2. The camera can record a video.

Disadvantages:

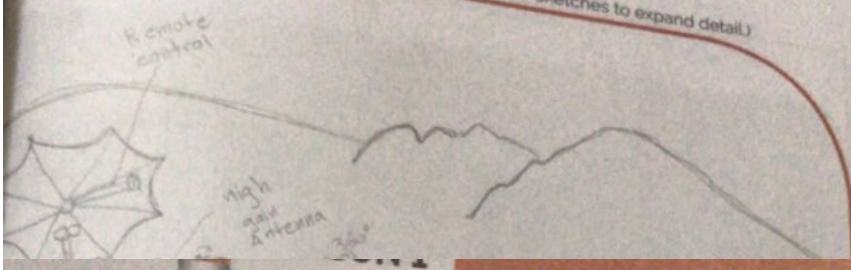
- 1. The vehicle is weak.
- 2. wheels are too small.



ابحث في المتاحف الورقية أو الرقمية عن معنى
"الألب": القوم يتجمعون على بؤرة إنسان يحصل الناس على
للطباعة 150 - 200

FINAL DESIGN

(Extra space is available on the next page for sketches to expand detail.)



Reasons for choosing design:

..Because.. it.. has.. advanced.. technology.. :.. Moreover, it.. is.. strong.. and..
..it.. could.. handle.. the.. difficult.. climate.. in.. mars..

Material(s):

...Stainless.. steel.. →.. Gas.. generators.. &.. Aluminium.. &.. Copper.. &.. Titanium..

Reasons for choosing material(s):

...Strong.. →.. light.. and.. Fused.. at.. a.. very.. high.. temperature..

أتمنى لكم بالتوفيق
تنسيق وإعداد وتجميع
هذا الملف نوف الحضرمي
دعواتكم لنا بالتوفيق