

Directions & Materials

- *Take out:*
 - **full sheet of paper, writing tool, & two colors**
- *Upper Right Corner:*
 - **Name, Period, Date**
- *Format:*
 - **Newspaper Style**
(fold in half – tall)
- *Title:* (hole punch side)
 - **The Young Scientist Challenge**

Electric Cars

Starting in the left column write down the sub-title (underline) & its **bullets** (1st Color), **mini-bullets** (2nd color)

- The question:
- Explanation the 1st test:
- _____ Data (1st test):
- Conclusion after 1st Test:
- **Explanation of 2nd Test:**
- _____ **Data from Test #2**
 - **Gas-Kart Time:**
 - **Electric-Kart Time:**
- Conclusion after 2nd Test:

Skip
4 Lines
Between
Each

Only
4 Lines
Between
these
bullets

What is the **Question?**

Directions:

- You are going to watch **Electric Cars 1**
- Afterwards write **YOUR** response.

Electric Cars

- **The question?**

- Are electric cars sluggish?

■ Explanation of 1st test:

- *What are they trying to do?*
- *How are they going to do it?*

Directions:

- You are going to watch **Electric Cars 2**
- Afterwards write YOUR response.

Electric Cars (cont.)

- **Qualitative Data (1st test)**
 - What did the ride feels like?
 - What differences were noticed?

Directions:

- You are going to watch **Electric Cars 3**
- Afterwards write YOUR response.

Electric Cars

- **Conclusion after 1st test:**
 - **YES or NO**
 - Explain why you feel this way
 - *Use evidence from the test in your explanation.*

Electric Cars – TEST #2

■ **Explanation of 2nd Test:**

- *What are they trying to do?*
- *How are they going to do it?*

Directions:

- You are going to watch **Electric Cars 4**
- Afterwards write YOUR response.

■ Quantitative Data (Test #2)

■ Gas-Kart Time:

Directions:

- You are going to watch **Electric Cars 5**
- Afterwards write YOUR response.

Electric Cars

■ Quantitative Data from Test #2

■ Gas-Kart Time: _____

■ Electric-Kart Time: _____

Directions:

- You are going to watch **Electric Cars 6**
- Afterwards write YOUR response.

Electric Cars

- **Quantitative Data from Test #2**
 - Gas-Kart Time: _____
 - Electric-Kart Time: _____
- What other quantitative data was gathered during this experiment?

Directions:

- You are going to watch **Electric Cars 7**
- Afterwards write YOUR response.

Electric Cars

■ Quantitative Data from Test #2

- Gas-Kart Time: 58 secs
- Electric-Kart Time: 60 secs

What other quantitative data was gathered during this experiment?

- The **electric cart** weighs 120 lbs more than the **gas cart**, but both cars produced 25 hp.
- Electric Car has 26 batteries

Add this info to the quantitative data

Electric Cars

■ **Conclusion after 2nd Test:**

*(this conclusion is based off the data collected in **both** tests!!!)*

■ **YES** or **NO**

■ Explain why you feel this way

■ *Use evidence from the **BOTH** tests to support your explanation.*

Electric Cars (cont.)

(add another bullet to Electric Cars)

(Shade it in your 1st color)

■ **Explanation of Third test:**

Electric Cars

■ **Explanation of 3rd Test:**

- *What are they going to do?*
- *How are they going to do it?*

■ **Explanation of 3rd Test:** (no video)

They are going to compare a GAS and ELECTRIC powered cars by having them compete in a ¼ mile race.

(add another bullet to Electric Cars)

(Shade it in your 1st color)

■ Quantitative Data from 3rd Test:

Directions:

- Follow the next directions before watching any videos....

Electric Cars
■ **Data from 3rd Test**

**Re-create the T-Chart!
2 minutes!!!**

**Shade in
your 2nd
color!**



(horsepower)

(weight)

(1/4 mile time)

(top speed)

X1 (electric)

Ferrari F430 (gas)

X1 (electric)	Ferrari F430 (gas)

Electric Cars

■ Quantitative Data from 3rd Test

	X1 (electric)	Ferrari F430 (gas)
<i>(horsepower)</i>	Video 8	Video 9
<i>(weight)</i>	Video 8	Video 9
<i>(1/4 mile time)</i>	Video 10	Video 10
<i>(top speed)</i>	Video 11	Video 11

Electric Cars (cont.)

(add another bullet to Electric Cars)

(Shade it in your 1st color)

■ **Qualitative Data from 3rd Test:**

■ Qualitative Data from 3rd Test:

- Who won? Who had the top speed?

Skip 2 lines
between each
mini-bullet.

- What effect did the wheels have on the race?

Skip 2 lines
between each
mini-bullet.

Shade
each mini-
bullets
(2nd color)

- Who was quicker? Who was the fastest?

Qualitative Data from 3rd Test

Directions:

- You are going to watch **Electric Cars 12**
- Afterwards write YOUR response.

(add another bullet to Electric Cars)

(Shade it in your 1st color)

■ **Final Conclusion:**

Electric Cars

■ **Final Conclusion:**

(this conclusion is based off all the evidence collected on in all three tests!!!)

■ **YES** or **NO**

■ **Explain** why you feel this way, Use evidence from the tests in your explanation.

■ **Highlight** (three colors): the **evidence from Test #1** (1st color), **evidence from Test #2** (2nd color), **evidence from Test #3** (3rd color)

■ **Use** complete sentences, **explain** yourself completely, and **write** clearly (so it can be read).