# TURTLES

# Students:

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# Saving Energy at Home

# About project:

- Time Frame : 6 weeks
- Working with Group
- Solving Problems
- Critical Thinking

# 1$^{st}$ week

# Plans:

a) Introduction to PBL
b) Entry event presentation
c) Making group contact


□ Fist week's tasks:

✔ Amount of energy consumption at home per day during a week
✔ Complete  worksheet #1

# Results of 1ˢᵗ week:

| 10:00 16:00 | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---|---|---|---|---|---|---|---|
| initial | 112520 kW*h | 112536 kW*h | 112552 kW*h | 112569 kW*h | 112584 kW*h | 112599 kW*h | 112618 kW*h |
| final | 112528 kW*h | 112545 kW*h | 112559 kW*h | 112575 kW*h | 112592 kW*h | 112611 kW*h | 112628 kW*h |
| Difference | 8 kW*h | 9 kW*h | 7 kW*h | 6 kW*h | 8 kW*h | 12 kW*h | 10 kW*h |
| Cost 1kW*h | 8.54 tg | 8.54 tg | 8.54 tg | 8.54 tg | 8.54 tg | 8.54 tg | 8.54 tg |
| Total cost | 68.32 tg | 76.86 tg | 59.78 tg | 51.24 tg | 68.32 tg | 102.48 tg | 80.54 tg |

# 2<sup>nd</sup> week

# Plans:

a) Analyze the table of energy consumption at home per day during a week

b) Calculate the cost of energy consumption

 Second week's tasks:

✔ DST presentation

✔ Energy consumption by devices seperately during a week

✔ Complete worksheet #2

# Results of 2$^{nd}$ week:

# 3ʳᵈ week

# Plans:

a) Check presentations
b) Explain the efficiency of energy usage and power calculations with their cost
c) Show types of bulb and their advantage and disadvantage
d) Own saving plan

 Third week's tasks:

✔ Find out power of each device from worksheet #2

✔ Calculate the amount of energy used by each device in one week

✔ Find the cost

✔ Make table and graph in excel

✔ Complete worsheet #3

# Results of 3ʳᵈ week:

# 4<sup>th</sup> week:

# Plans:

a) Make a debate for ways of saving energy
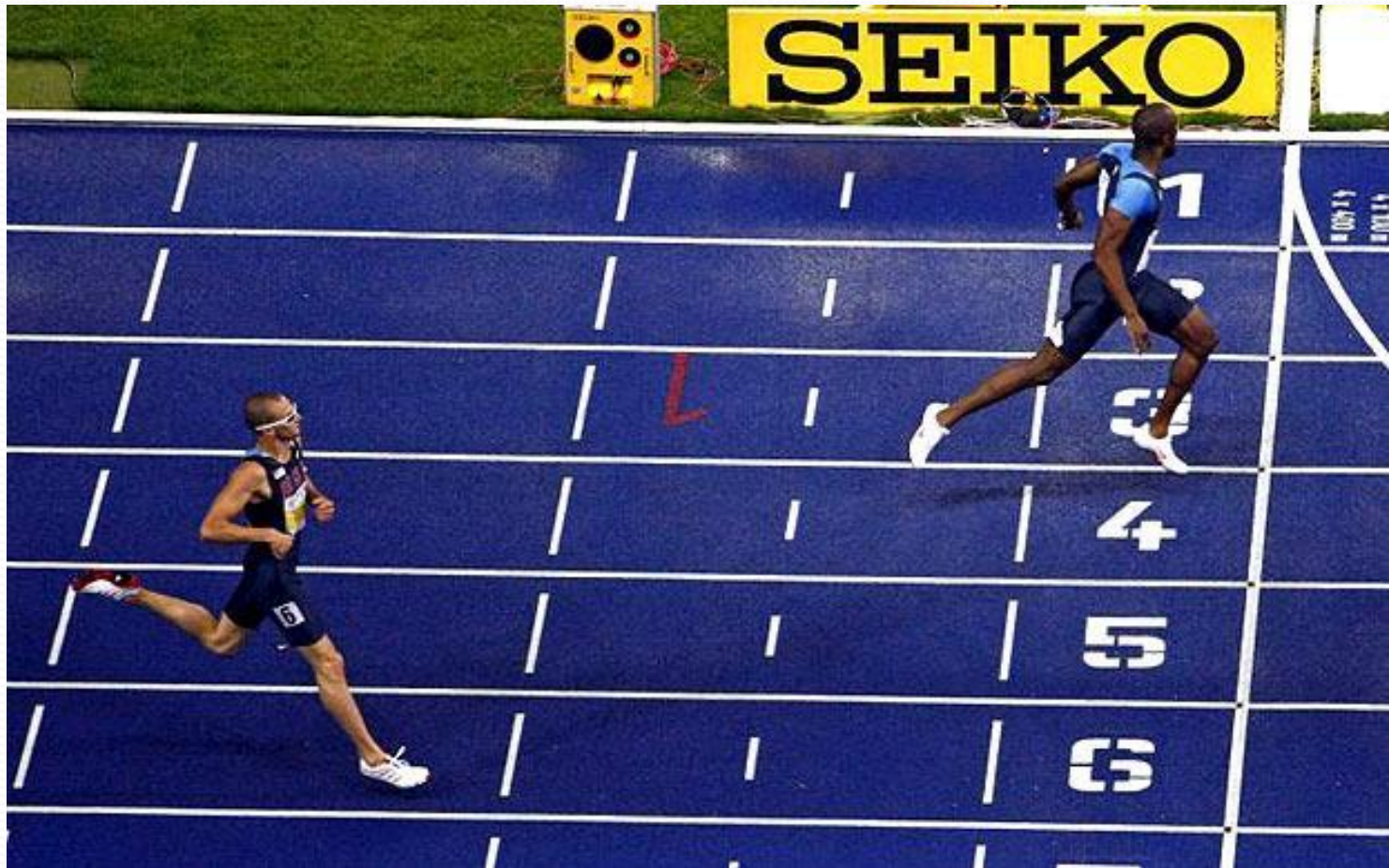
 Fourth week's task:

✔ Generate and apply energy saving plan in their research areas

# Results of 4<sup>th</sup> week:

# 5<sup>th</sup> week:

# Plans:

a) Analyzing the tables and graphs

▫ Fifth week's tasks:
✔ Retake the data of energy consumption by devices and in general
✔ Compare second data collection with previous one
✔ Final report
✔ Suggestions

# Results of 5<sup>th</sup> week:

# 6<sup>th</sup> week

# THANKS FOR ATTENTION!!!