

Introduction to Electricity with Lego Mindstorms

I Love Neutrinos

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Exercise 1

- ▣ How many Julius are 9800 TEP?
- ▣ Develop a EV3 program to caculate the number of Julius to satisfy the energy demand of Comunidad de Madrid



Exercise 2

- How many kWH are 9800 TEPs?
- Develop the calculus using a spread sheet.

20151027_spreadsheets_examples.xls

Arial 10

B5

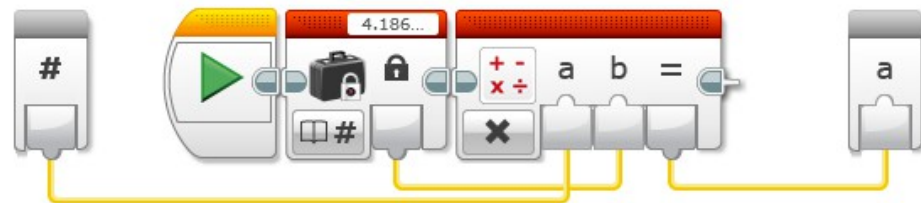
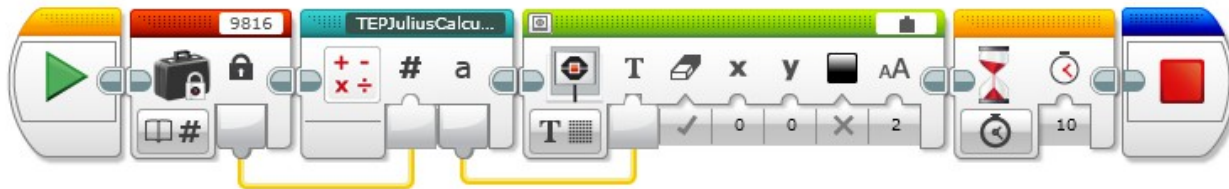
	A	B	C	D	E	F	G	H	I	J	K
1	TEP	KWH									
2	1	11630									
3	9816										
4											
5											
6											
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EXAMPLE2 GRAPH

Sheet 2 / 3 PageStyle_EXAMPLE2 Sum=0 100%

Exercise 3

- ❑ How many kWh are 9800 TEPs?
- ❑ Develop an EV3 program. To solve this problem, develop a module.



Exercise 4

- What is the shape of the energy consumed in Comunidad de Madrid?
- Develop a graph using a spread sheet.

20151027_spreadsheets_examples.xls

Arial 10

G13

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
		2000	2002	2004	2006	2008	2010	2011	2012	2013				
1														
2	P. Petrolíferos	5962	6250	6366	6603	6673	6111	5954	5678	5367				
3	Electricidad	1871	2055	2288	2493	2633	2543	2466	2249	2176				
4	Gas natural	1208	1464	1758	1929	2047	2156	2026	2024	2056				
5	Energía térmica	134	164	187	197	195	180	210	213	209				
6	Carbón	26	23	20	19	17	14	8	6	6				
7	Otros (biocarb.)	0	0	0	3	21	48	28	29	2				
8	Total	9200	9955	10619	11244	11614	11054	10691	10192	9816				
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														

EXAMPLE2 GRAPH

Sheet 3 / 3 PageStyle_GRAPH Sum=0 100%