

# HAKUO FOOTPRINT

~In the selectable society~

Tokyo Metropolitan Hakuo Junior and Senior High School

## The number of soft drinks in plastic bottles / week

$$= \frac{\text{Japan's PET bottle production} \times (1 - \text{Japan's PET bottle recycling rate})}{\text{World PET bottle production} \times (1 - \text{World PET bottle recycling rate})} \times \frac{\text{population of Japan}}{\text{world population}}$$

$$\times \frac{\text{The number of PET bottles you buy for a week}}{\text{Japan's PET bottle production} \div \text{population of Japan} \times \frac{7}{365}}$$

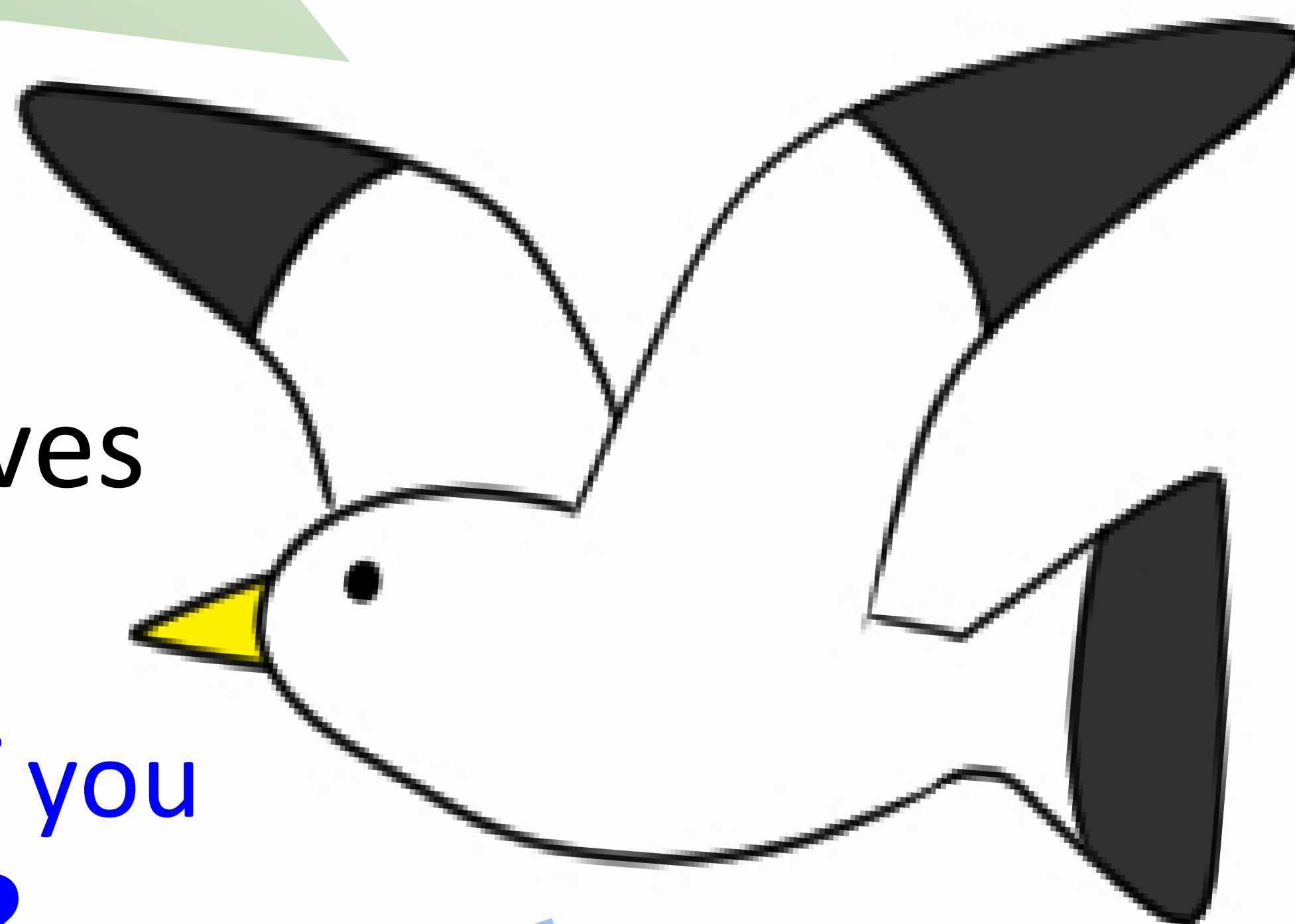
$$= 0.2425 \times (\text{The number of PET bottles you buy for a week})$$

Bottles	How many earths
1	0.24
2	0.49
3	0.72
4	0.97
5	1.21
6	1.45
7	1.69
8	1.94
9	2.18
10	2.42

How many **Earths** would be needed to acquire all the resources for letting everyone in the world use the same number of plastic bottles as **you do**

- How do you make choices everyday?
- Check them from the environmental perspectives (=HAKUO Footprint)

What if every single one of you start thinking with it ?



## HAKUO Footprint?

- Original measurement
- Based on individual choices
- Leads you to the new understanding



## The style of bathing

Japanese people use 40 percent of water for bathing

How many times the length you spend in a shower is longer than the average time

	Household members			
	2	3	4	5
1min	0.32	0.23	0.22	0.20
2min	0.64	0.47	0.43	0.41
3min	0.97	0.73	0.65	0.61
4min	1.29	0.93	0.87	0.82
5min	1.61	1.21	1.09	1.02
6min	1.93	1.46	1.30	1.22
7min	2.25	1.63	1.52	1.43
8min	2.58	1.86	1.74	1.63
9min	2.90	2.09	1.96	1.84
10min	3.23	2.33	2.17	2.04

## The kinds of stationery

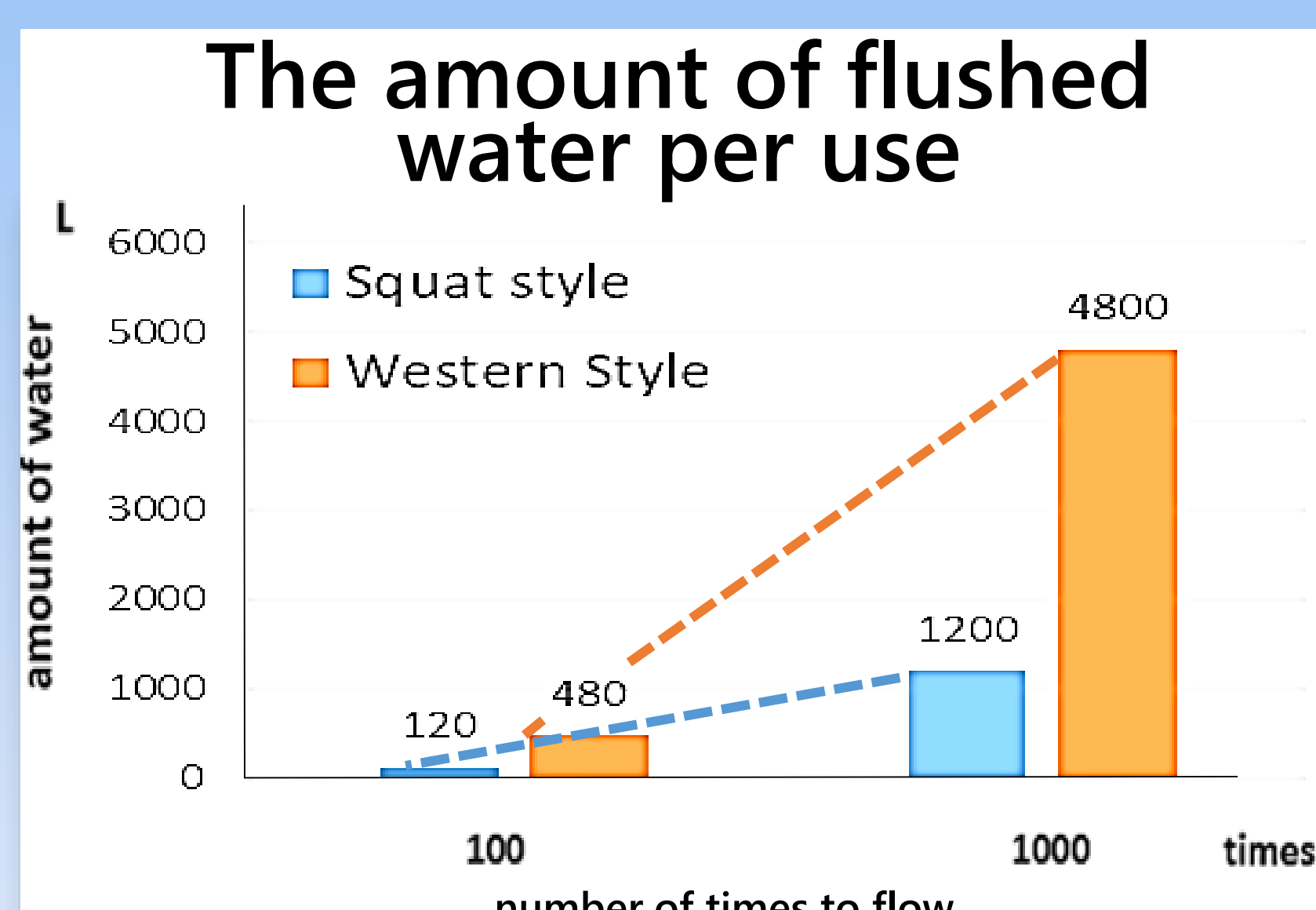
	PENCIL	MECHANICAL PENCIL
Comparison		
Material	Tree(plant) ⇒Sustainable resource	Plastic(petroleum) ⇒Limited resource
Material/Chemical recycle	×	< 23% Material recycle 4% Chemical recycle
Heat of combustion	wood →10000kJ/kg	PP⇒34000~ 46000kJ/kg PS⇒41900kJ/kg
Length that can be written	50km	> 0.24km (9.6km/a case of lead)

Which writing implement will you use?

## The types of toilet

The amount of saved water per use is 3.6L

- vertical axis: total amount of flushed water(L)
- horizontal axis: number of times to flow



Small things make a **big** difference. Play **YOUR** part!