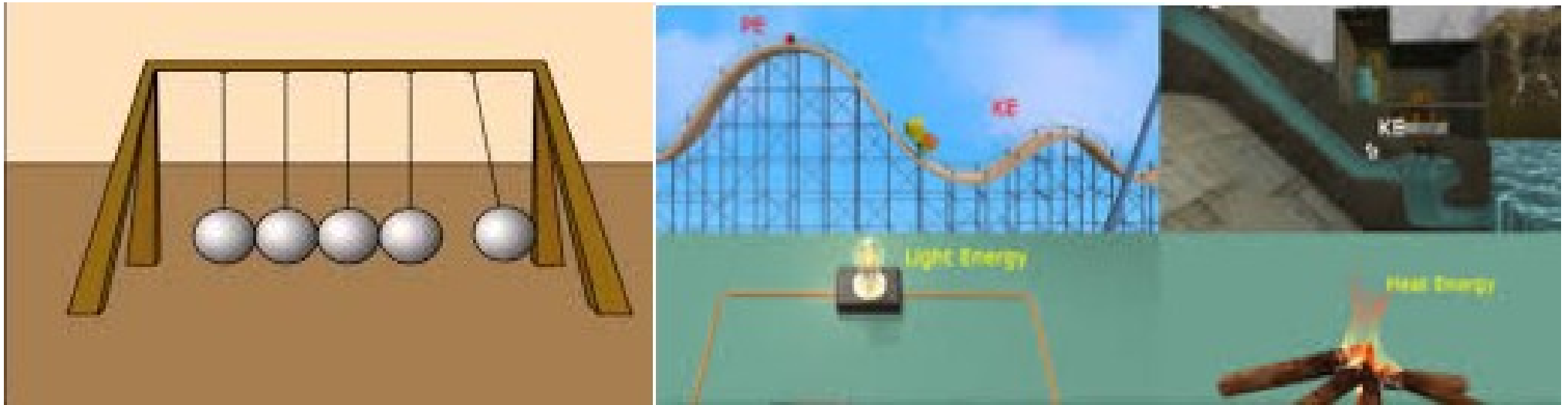


ENERGIYANING SAQLANISH QONUNI



***TOSHKENT DAVLAT
PEDAGOGIKA UNIVERSITETI***

19 MAY 2018 YIL

REJA

1. Energiyaning saqlanish qonuni (nazariy ma'lumot).
2. Masalalar yechish.
3. Energiyadan foydalanish, tejash haqida qiziqarli faktlar.
4. Qayta tiklanadigan energiya manbalari.

ENERGIYANING SAQLANISH QONUNI (nazariy ma'lumot)

???

MASALALAR YECHISH

2. 80. Горизонтал учиб келаяётган ўқ жуда сиғил қаттиқ стерженьга осилган шарга тетади ва унда тиқилиб қолади. Ўқ массаси шар массасидан 1000 марта кичик. Стержень осилган нуқтадан шарнинг марказига бўлган оралиқ 1 м га тенг. Агар ўқ теккандан кейин шар осилган стержень 10° бурчакка оғси, ўқнинг тезлиги топилсин.

MASALALAR YECHISH

2. 88. $m = 20$ г массали пўлат шарча $h_1 = 1$ м баландликдан пўлат тахтачанинг устига тушиб, унда $h_2 = 81$ см баландликкача сакрайди. 1) Урилиш вақтида тахтачанинг олган куч импульси. 2) урилишда ажралган иссиқлик миқдори топилсин.

MASALALAR YECHISH

2. 41. Оғирлиги 20 т бўлган вагон 6000 Н ишқаланиш кучи таъсирида текис секинлашувчан ҳаракат қилади ва маълум вақт ўтгач тўхтайдди. Вагоннинг башланғич тезлиги 54 км/соат га тенг. 1) Ишқаланиш кучининг иши, 2) вагон тўхтагунча ўтган масофа топилсин.

MASALALAR YECHISH

2. 45. Автомобилнинг оғирлиги $9,8 \cdot 10^3$ н. Автомобиль ҳаракатланаётганда унга ўз оғирлигининг 0,1 қисмига тенг бўлган ўзармас ишқаланиш кучи таъсир қилади. Автомобиль 0,5 км масофада ўз тезлигини $v_1 = 10$ км/соат дан $v_2 = 40$ км/соат гача ошириш учун, унинг двигатели қанча миқдорда бензин сарф қилади? Двигателнинг фойдали иш коэффициенти 20%, бензиннинг иссиқлик бериш қобилияти $4,6 \cdot 10^7$ Ж/кг га тенг.

MASALALAR YECHISH

2. 47. Автомобиль 40 км/соат тезлик билан ҳаракатланганда, ҳар 100 км йўлга 13,5 л бензин сарф қилса ва шу шартда қуввати 16,3 о. к. га тенг бўлса, автомобиль двигателининг ф. и. к. топилсин. Бензиннинг зичлиги $0,8 \text{ г/см}^3$. Қолган зарур маълумотлар 2.45- маселанинг шартидан олинсин.

MASALALAR YECHISH

2. 50. Оғирлиги 2 кГ бўлган тош маълум баландликдан ерга $1,43 \text{ сек}$ да тушади. Тошнинг йўlining ўрта нуқтасидagi кинетик ва потенциал энергияси топилсин. Ҳавонинг қаршиллиги ҳиссбга олинмасин.

MASALALAR YECHISH

2. 51. Тош баландлиги $H = 25$ м бўлган минорадан $v_0 = 15$ м/сек тезлик билан горизонтал отилган. Тошнинг ҳаракат бошланишидан бир секунд ўтгач кинетик ва ю-
тенциал энергияси топилен. Тош массаси $m = 0,2$ кг га
тенг. Ҳавонинг қаршилиги ҳиссба олинмасин.

ENERGIYADAN FOYDALANISH, TEJASH HAQIDA QIZIQARLI FAKTLAR

Remember that time when your Mother would yell at you for keeping the fridge door open for too long? Yeah, she had a reason, a very good one indeed

Every time you open the fridge door, approximately 30% of the cold air escapes! This basically leads to more power consumption and a higher #electricity bill.

Google is polluting the world!

According to the ubiquitous Google, they themselves, use 0.0003 kWh of energy to answer an average search query and gives out about 0.2g of carbon dioxide.

Cook in a microwave to save energy

A microwave uses about 50% less energy as compared to an oven. Conserve energy, have Pizzas!

Home electronics consume energy even when switched off!

Approximately, 75% of electricity used to power home electronics is consumed while the products are off. Televisions consume a lot of energy when turned off which is used in the instant working of the T.V so we don't have to wait for a minute or two for it to start as soon as we switch it on. Keep them unplugged when not in use.

ENERGIYADAN FOYDALANISH, TEJASH HAQIDA QIZIQARLI FAKTLAR

Cars burn more energy than most industries

Almost 1/5th of the world's energy is used for transport whereas most of us blindly blame industries for the same.

China beats U.S.A

China is the largest consumer of energy and the largest emitter of carbon dioxide in the world now. The United States of America houses less than 5% of the world's energy.

LEDs are the ultimate energy saver

LEDs are very energy efficient and cheap too. Lights in our homes and offices should be replaced with LEDs to conserve energy.

Every year, more than \$13 billion worth of energy leaks from houses through small holes and cracks. That's more than \$150 per family!

ENERGIYADAN FOYDALANISH, TEJASH HAQIDA QIZIQARLI FAKTLAR

Search for the stars: Before purchasing an electronic device, check the appliance for its star-rating. The higher the number of stars, the better the efficiency.

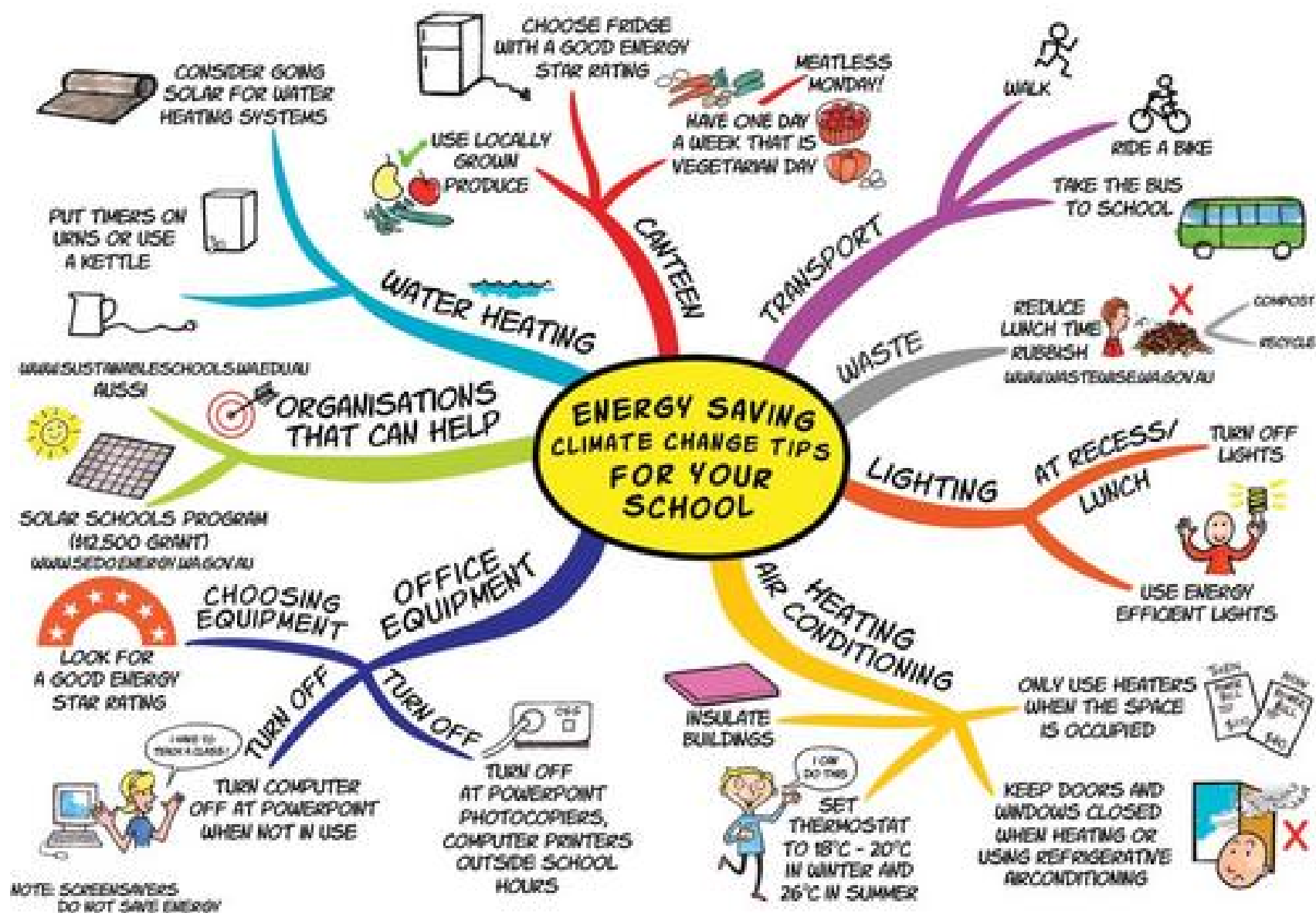
About 30% of the energy used in commercial and industrial buildings is used inefficiently or unnecessarily.

More than 25% of energy consumption in homes goes to lighting. Only about 10% of the energy used by a bulb creates light, the other 90% creates heat.

Home refrigerators in the U.S. use the same amount of electricity as 25 large power plants every year.

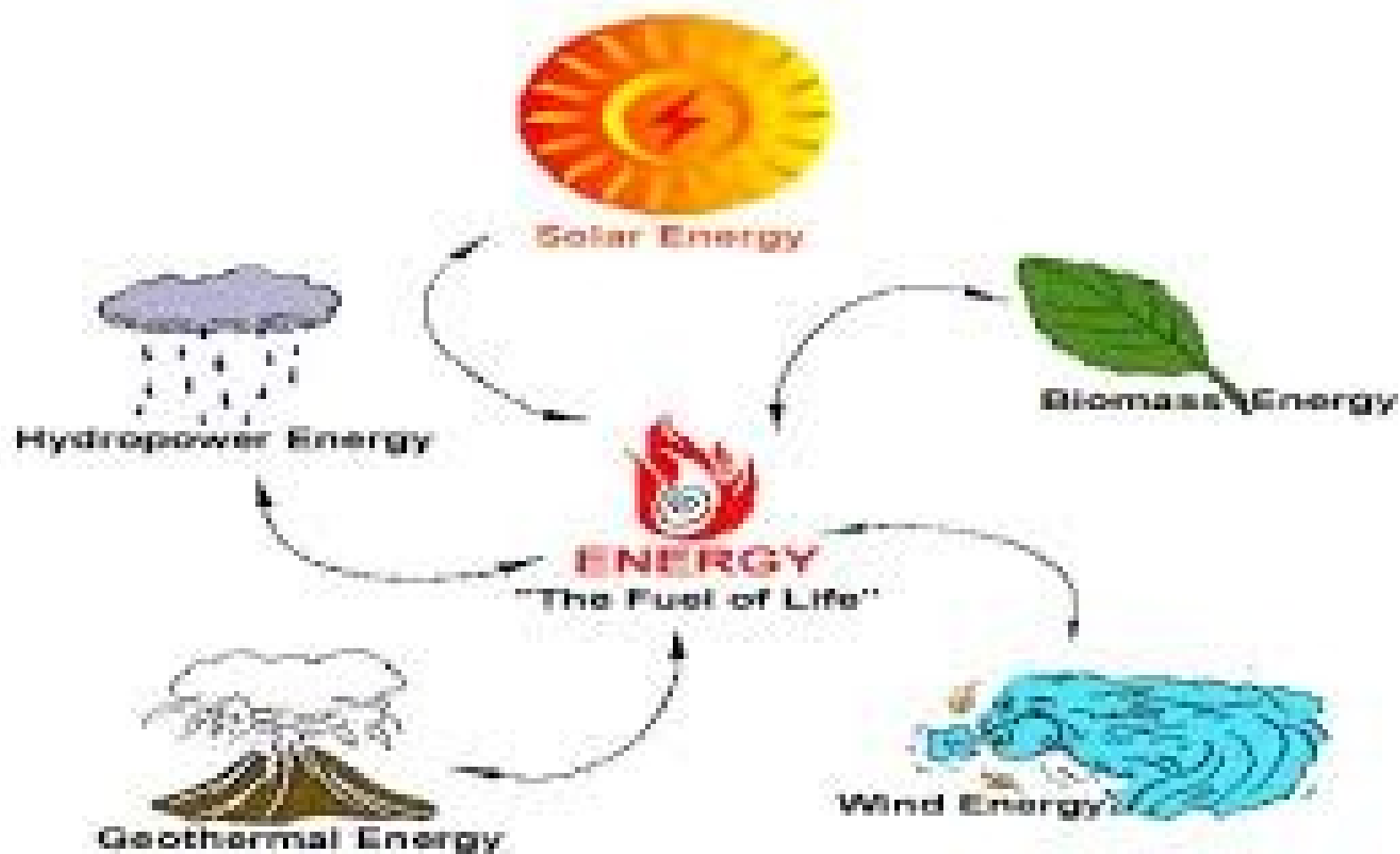
Over 70% of electricity in the U.S. is generated from non-renewable sources.

ENERGIYADAN FOYDALANISH, TEJASH HAQIDA QIZIQARLI FAKTLAR



QAYTA TIKLANADIGAN NERGIYA MANBALARI

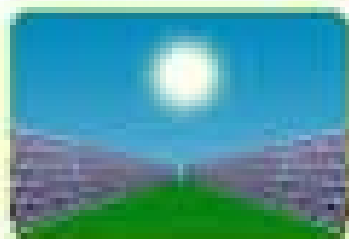
Forms of Renewable Energy



QAYTA TIKLANADIGAN NERGIYA MANBALARI



HYDROPOWER
ENERGY



SOLAR ENERGY



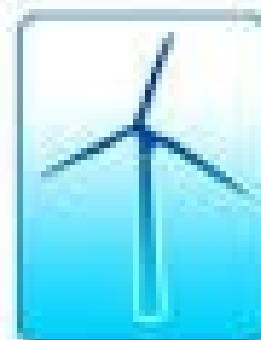
BIOMASS
ENERGY



GEOTHERMAL
ENERGY



OCEAN ENERGY



WIND
ENERGY

