

Ponder (E&M) with Paul or Flash-Back with Flasch

What do you know currently about magnetism – insights – flashbacks:

1. What does E&M mean?

Electro-magnetism

2. Why are they always put together?

One causes The other

3. What is Electromagnetic Radiation? Name six of them? What do they have in common? How are they different?

Electromagnetic Radiation is light

1. radio 2. infrared 3. visible light 4. ultraviolet 5. x-rays 6. Gamma rays

What the above have in common is \vec{v} $3 \times 10^8 \text{ m/s}$ $186,000 \text{ m/s}$

How the above differ is $v = \text{freq} \cdot \lambda$

4. What is ironic about that fact that this unit is almost entirely conceptual?

5. What causes a natural magnetic to be a magnetic?

6. What is a magnetic domain?

7. One can have an object positively or negatively charged but can one have just a north pole or just a south pole?

8. Of the four fundamental forces how are gravity and E&M different from the strong and weak forces?

Which is a stronger force, gravity or E&M?

Why doesn't E&M work over long distances but gravity does not?

9. Name six places one can find a magnet outside of school:

1.

2.

3.

4.

5.

6.