

CELLULAR ENERGY PIXEL ART ACTIVITY

- Gamified Activity
- Instant student feedback
- Low-prep
- Easy to Grade

How do they Compare?

Photosynthesis and cellular respiration are like two sides of the same coin, showcasing the interconnectedness of life's processes. While photosynthesis primarily occurs in plant cells, cellular respiration happens in both plant and animal cells. They're also opposite reactions, complementing each other perfectly: photosynthesis stores energy by making glucose from light energy, while cellular respiration unlocks that stored energy by breaking down glucose, thus creating a continuous cycle essential for life on Earth. Both processes rely on specific organelles—chloroplasts for photosynthesis and mitochondria for cellular respiration—each playing a vital role in harnessing and converting energy. Together, they demonstrate the elegant balance in nature, ensuring energy flow and sustenance for all living organisms.

Conclusion

In essence, photosynthesis and cellular respiration stand as the essential yin and yang of life's energy and cyclical nature of energy flow within ecosystems. Through the collaboration of chloroplasts and mitochondria within cells, these processes ensure the perpetuation of life, highlighting the intricate dance between these two processes sustains life as we know it, demonstrating the biological world's energy exchange.

SURVIVING in
Secondary

Question

sunlight to create food in a process called...?

type of cell does photosynthesis take place?

organelle does cellular respiration take place?

reactants of cellular respiration are glucose and ...?

pigment in that makes a plant appear green?

step of the light-independent step is also known as the...?

chemical energy created during cellular respiration? (Abbr.)

what is the first step in cellular respiration?

organelle does photosynthesis take place?

process occurs in both plants and animal cells?

products of photosynthesis are...