$$
\begin{aligned}
& \text { Quiz } 2 \\
& 5 / 4 / 2023
\end{aligned}
$$

## Name:

Find the interval of convergence of the power series $\sum_{n=0}^{\infty} \frac{x^{n}}{n\left(2^{n}\right)}$ using the following procedure:

1. Where is this power series centered at?
2. Use the Ratio (or Root) Test to determine the radius of convergence.
3. Check the convergence at the end points. Make sure to state the Convergence Test you use.
4. Conclusion: the interval of convergence is $\qquad$
