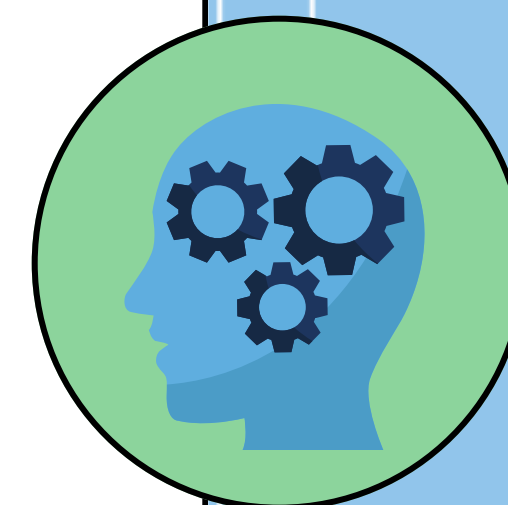
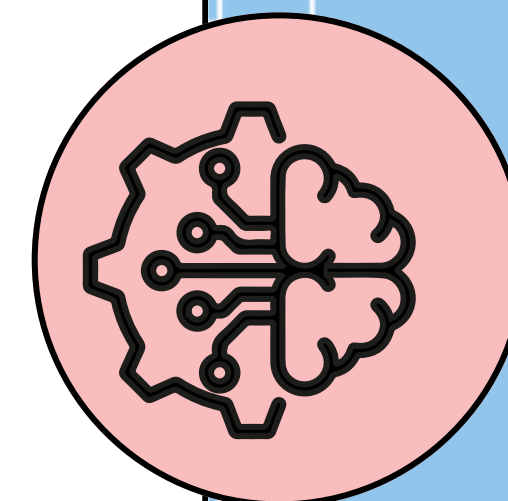


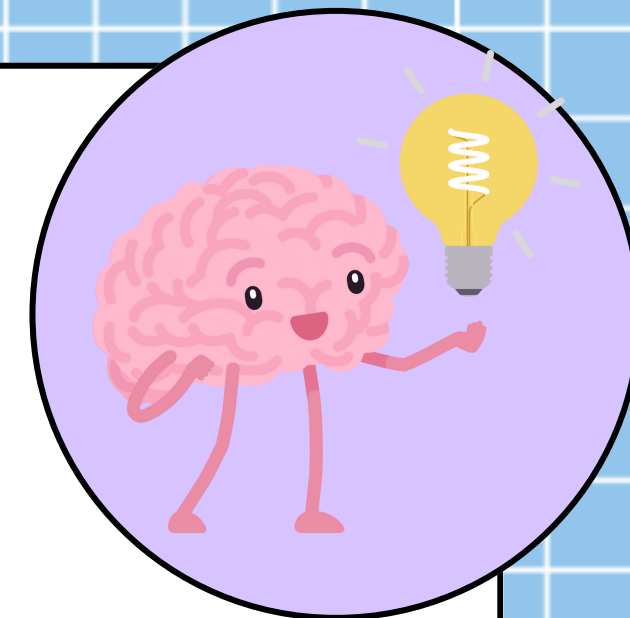
# Redes Neurais Artificial

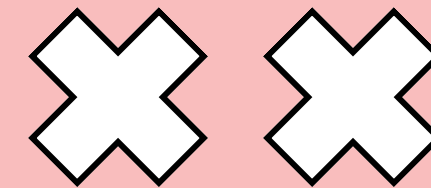
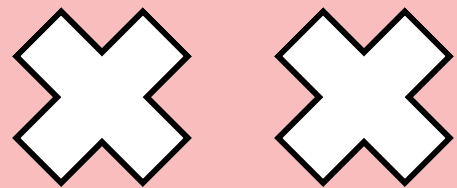
2D Emily, Cauã e Anselmo



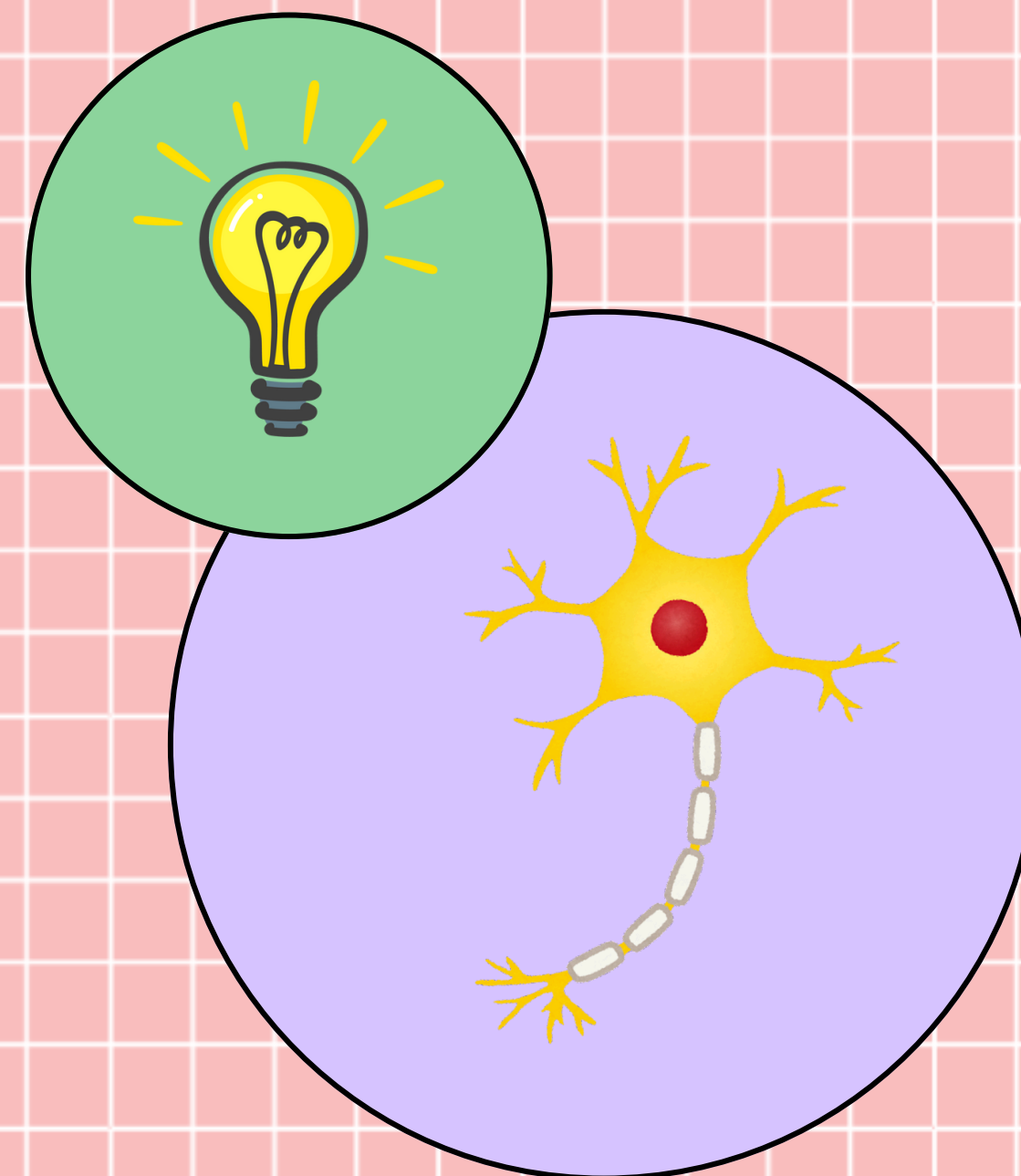
## **Qual o conceito de uma Rede Neural?**

*É basicamente fazer com que as máquinas produzirem o comportamento do cérebro humano.*



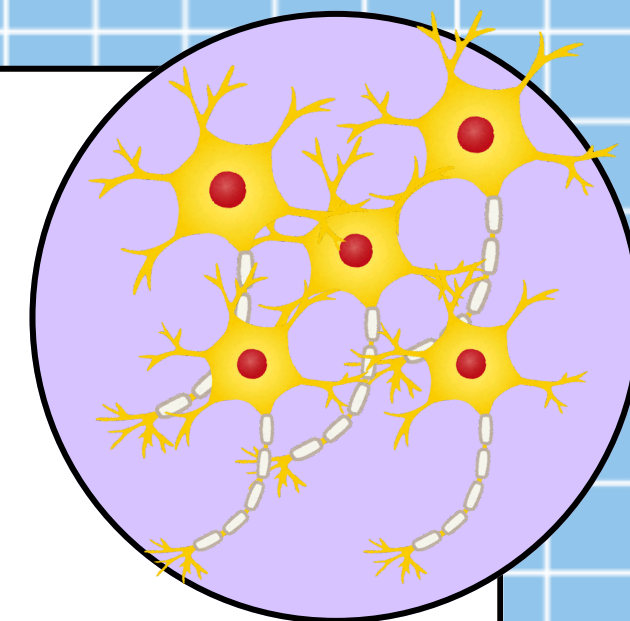


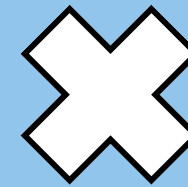
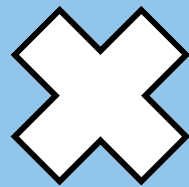
- Como aprendemos tantas coisas?
- O que faz o cérebro tão especial?



**mas como é uma estrutura tão simples  
que consegue aprender tanta coisa?**

*exatamente devido à grande  
quantidade de neurônios  
a sua capacidade de paralelismo.*

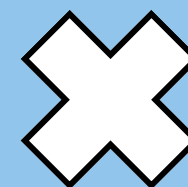
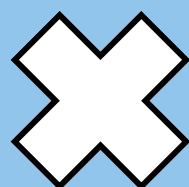
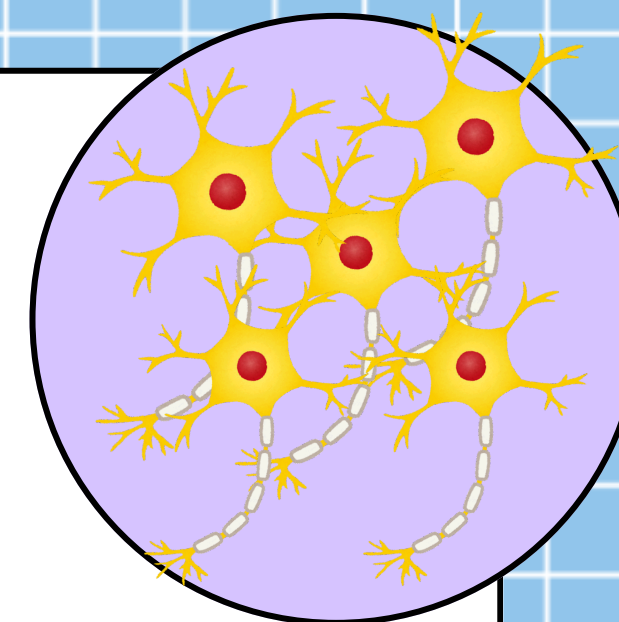


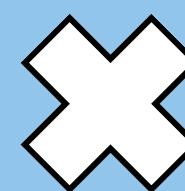
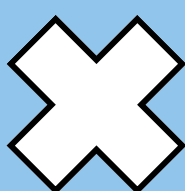
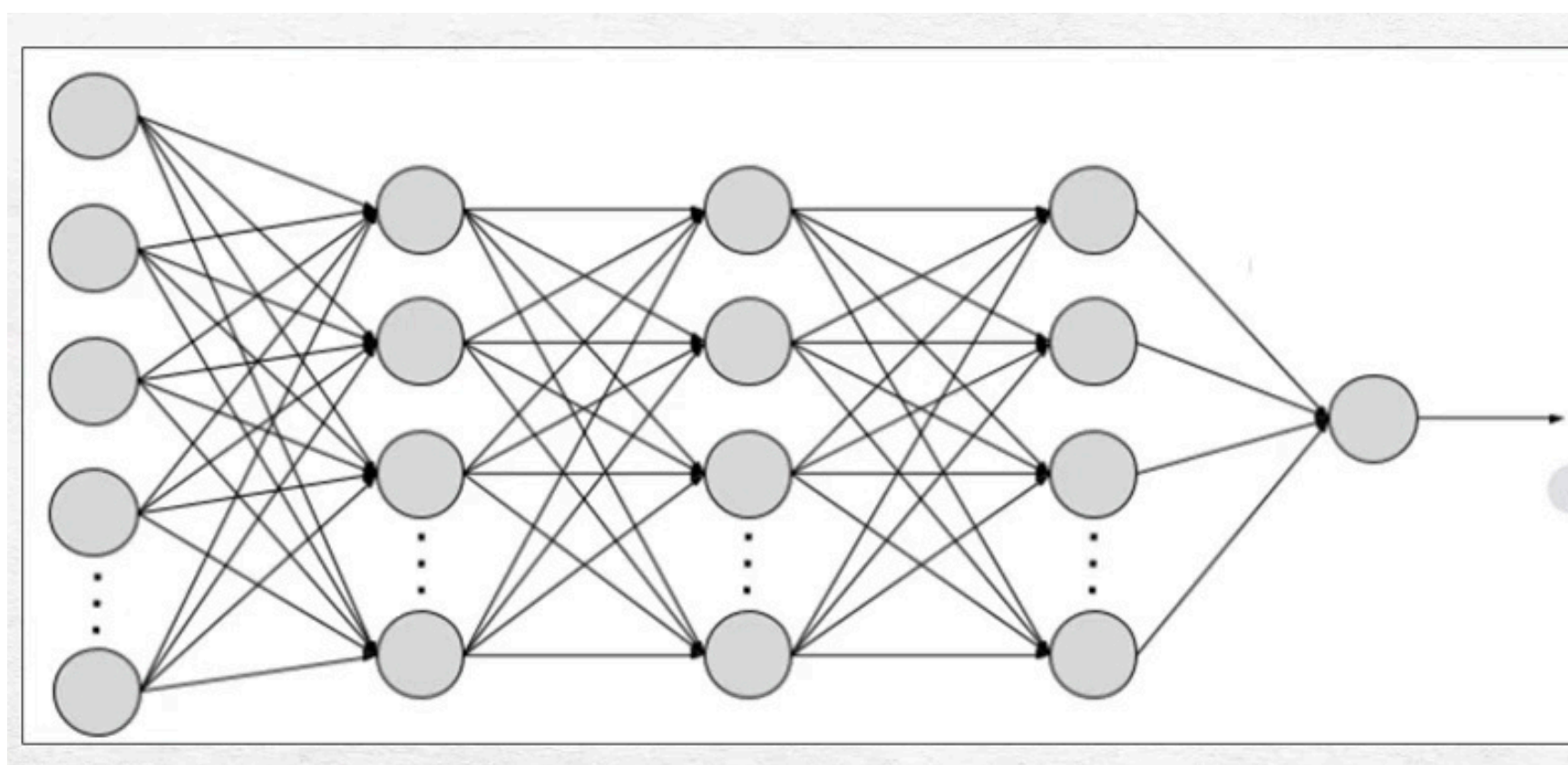
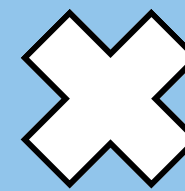


**O que foi pensado ?**

*já que o cérebro faz isso de uma forma excelente com os neurônios*

"por que que não tentamos fazer  
isso nas máquinas"


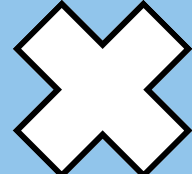




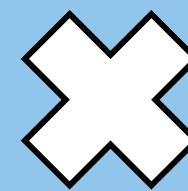
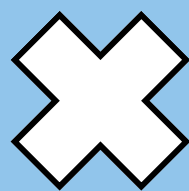
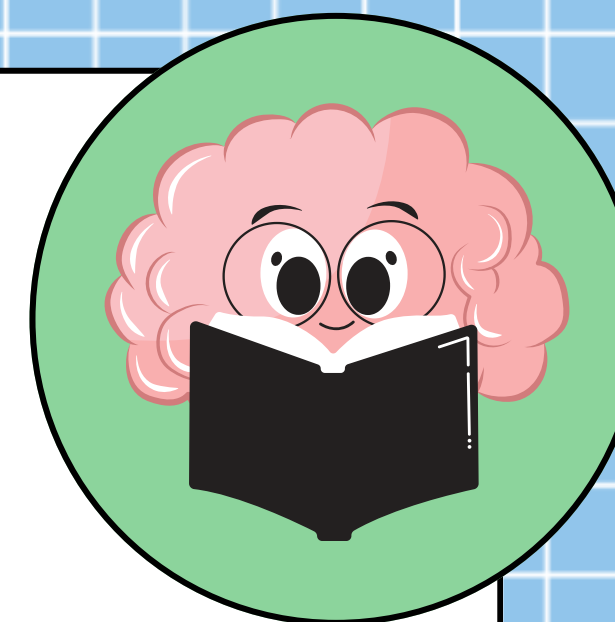
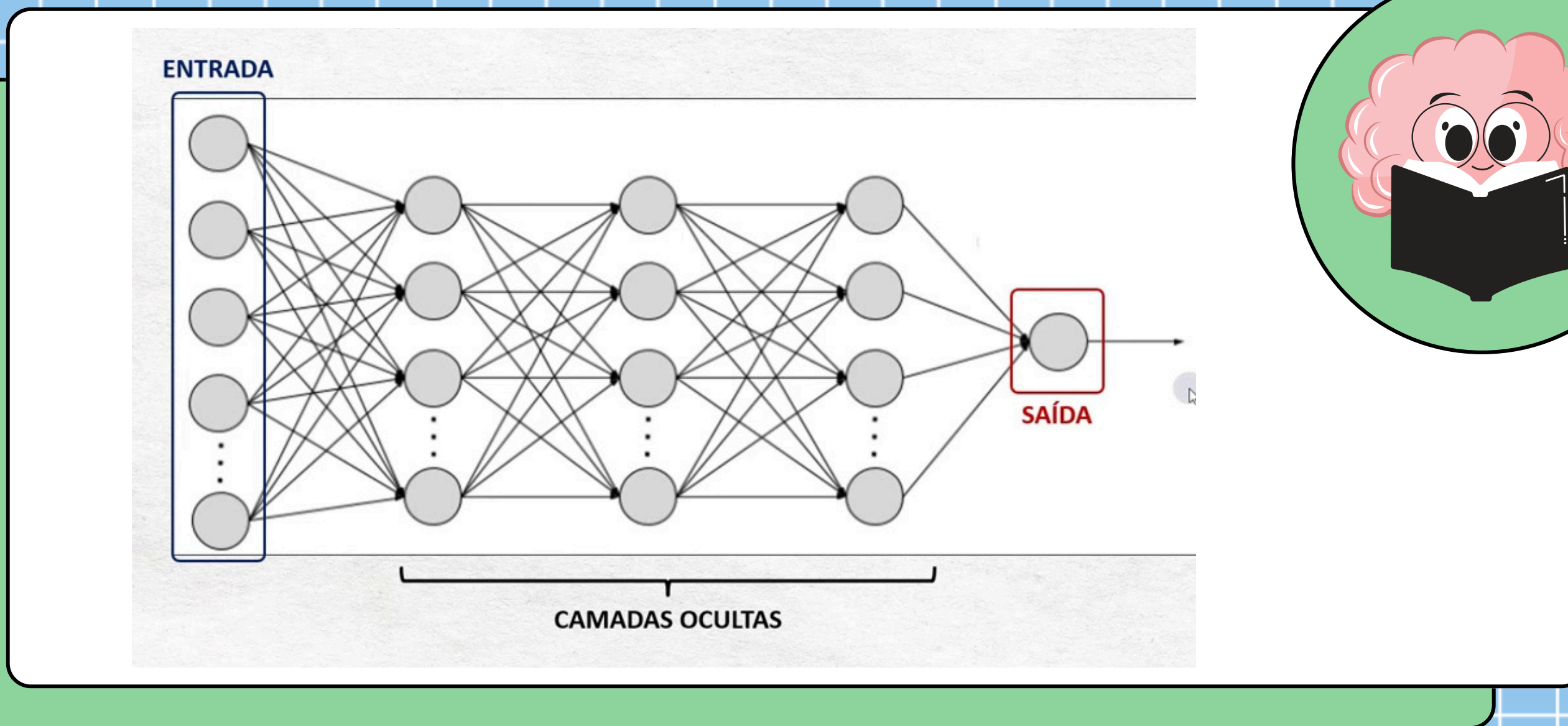
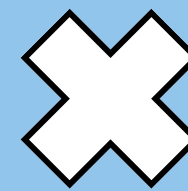
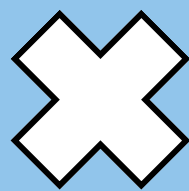


**Seu objetivo é:**

tentar simular um funcionamento do cérebro  
deixando que os neurônios artificiais se  
organizam sozinho





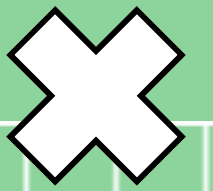
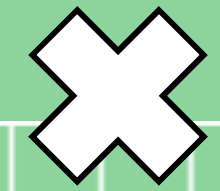


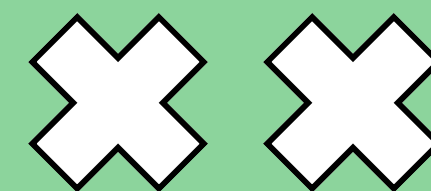


**INTELIGÊNCIA ARTIFICIAL**

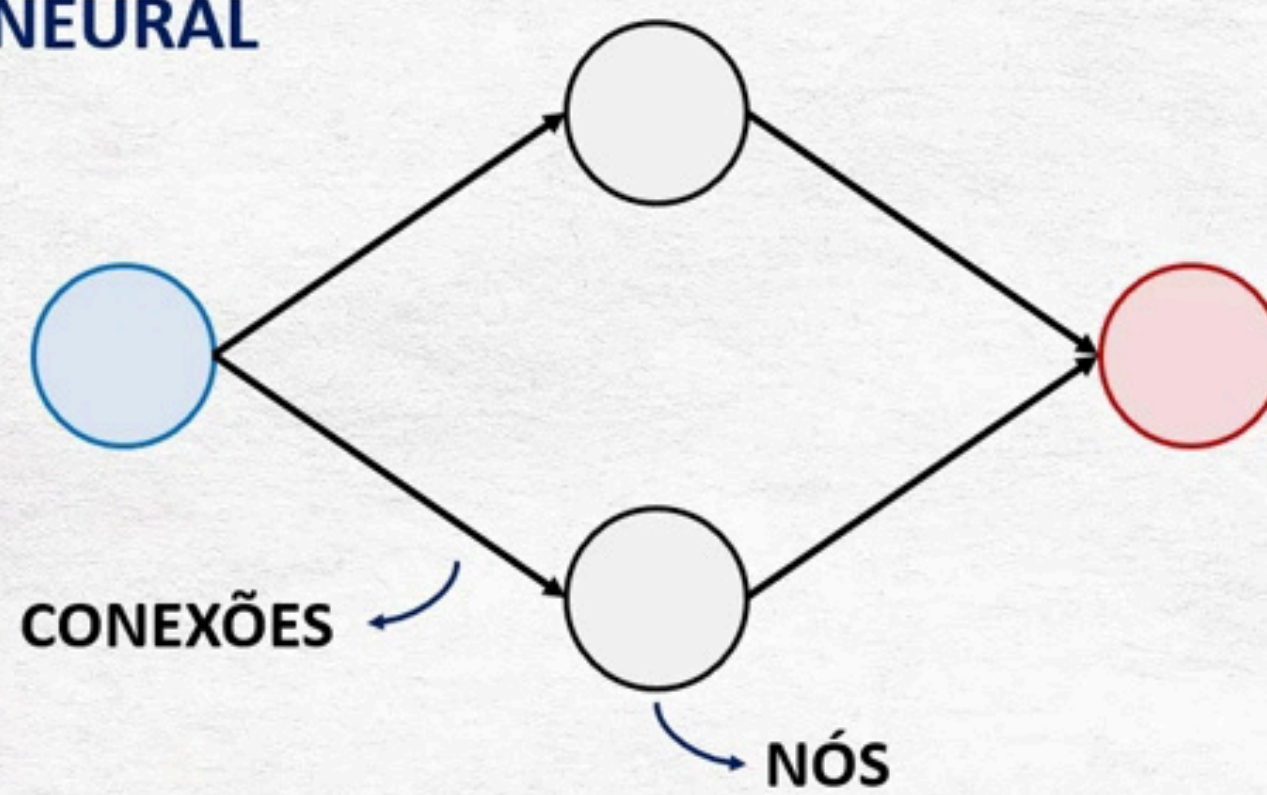
**MACHINE LEARNING**

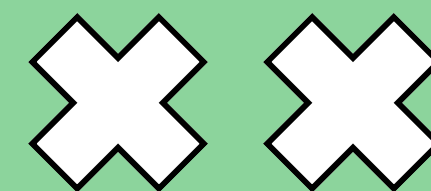
**DEEP LEARNING**



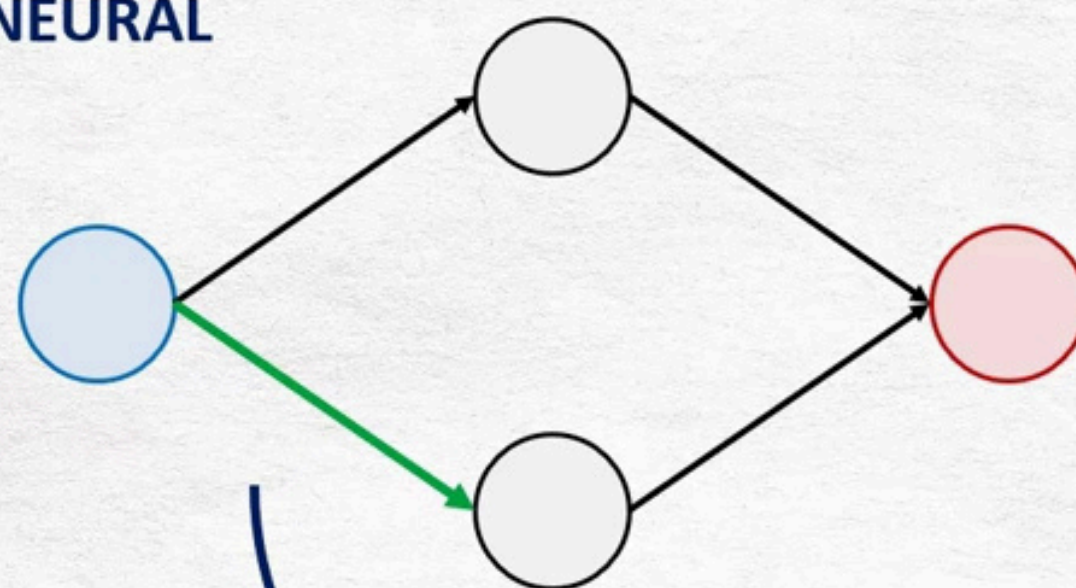


REDE NEURAL



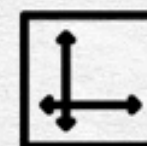


## REDE NEURAL



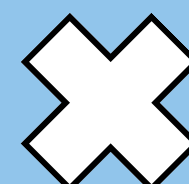
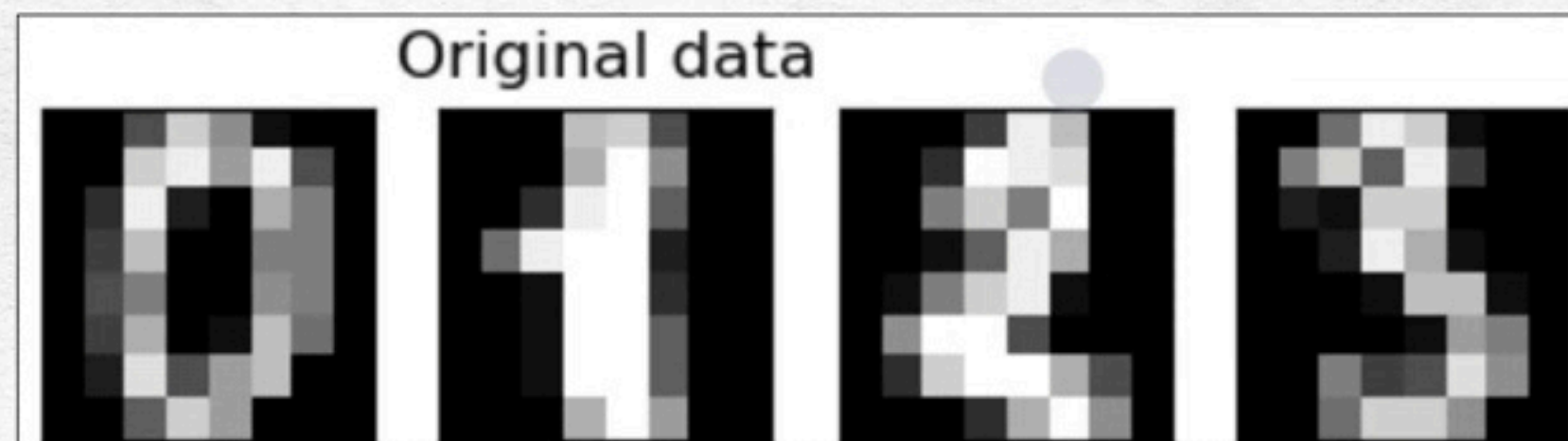
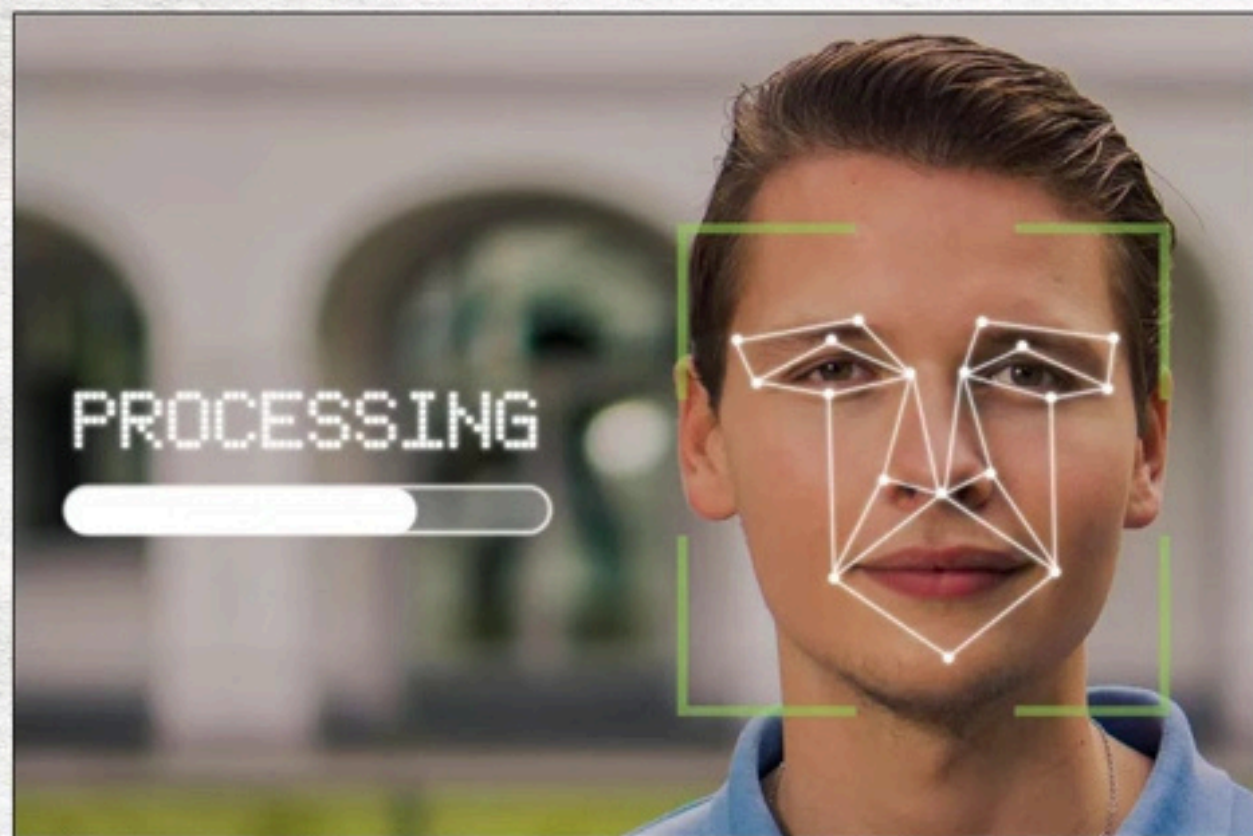
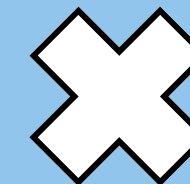
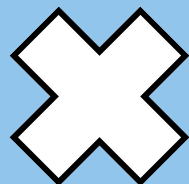
x PESO

+ VIÉS



FUNÇÃO DE  
ATIVAÇÃO







## **Importância**

**São uma das razões para o progresso em IA, machine learning (ML) e deep learning**

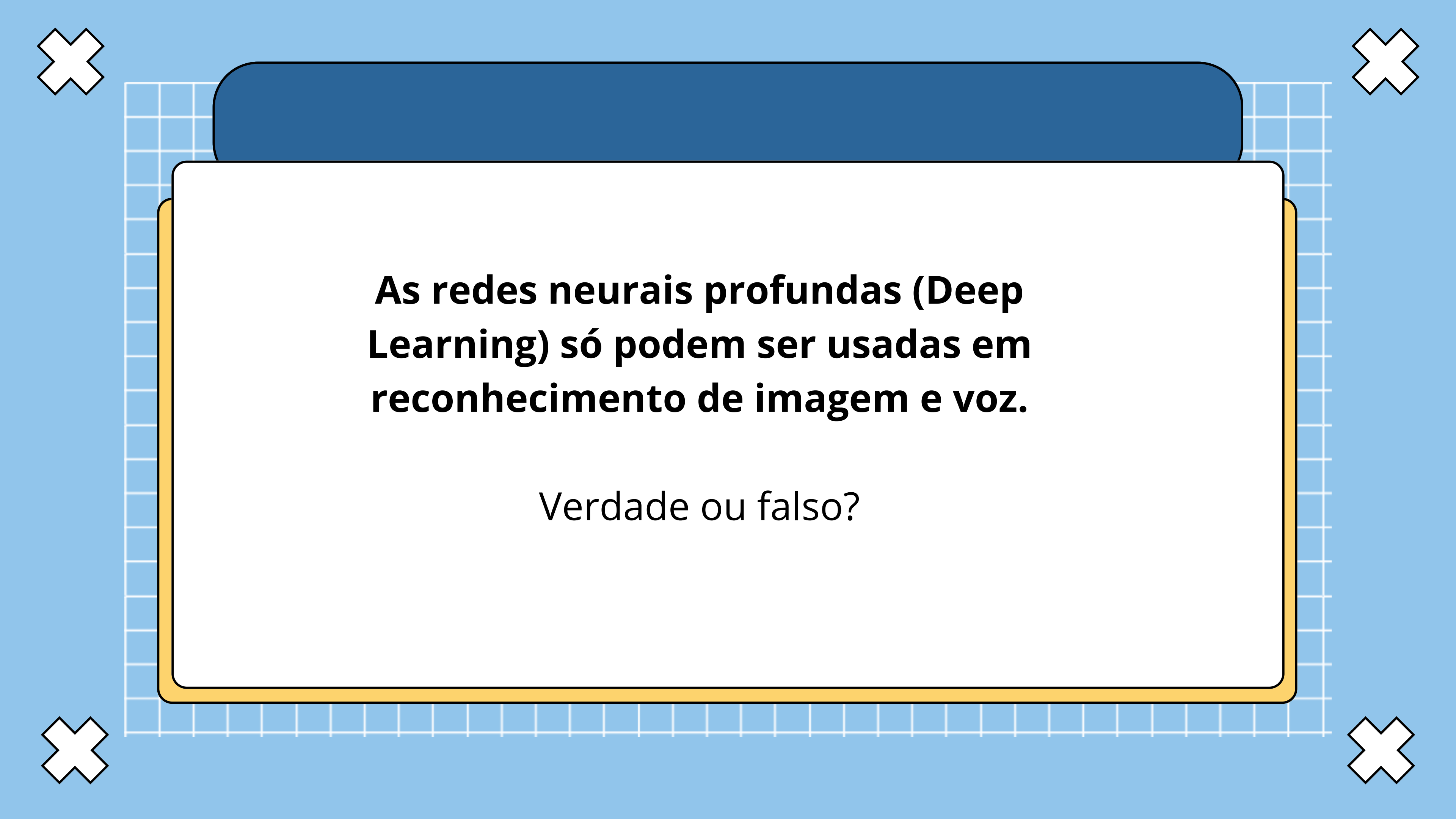
**São usadas em modelos de linguagem grande (LLMs) como o ChatGPT, geradores de imagens de IA como o DALL-E e modelos de IA preditiva**



**Redes neurais artificiais são inspiradas no funcionamento do cérebro humano.**

**☐ Verdadeiro**

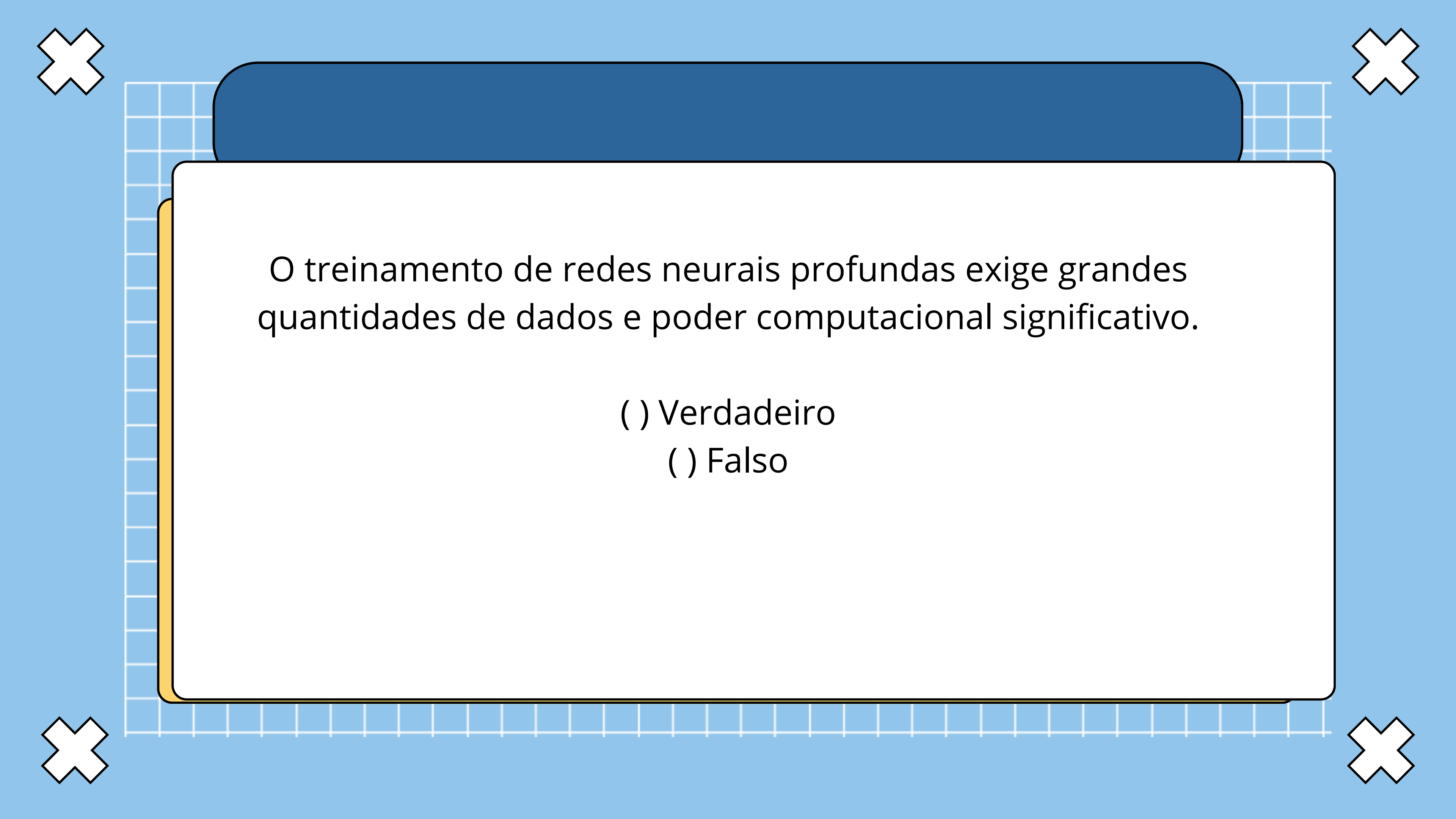
**☐ Falso**



**As redes neurais profundas (Deep Learning) só podem ser usadas em reconhecimento de imagem e voz.**

Verdade ou falso?

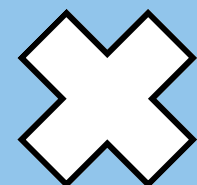
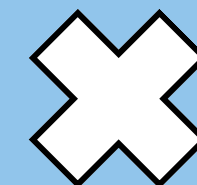
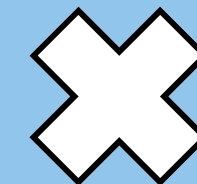
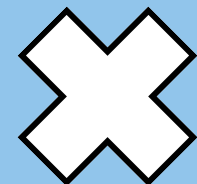




O treinamento de redes neurais profundas exige grandes quantidades de dados e poder computacional significativo.

☐ Verdadeiro

☐ Falso



**Obrigado**

2 ano D