

TABLE 2.2 Pros and Cons of Different Neuroscience Techniques

TECHNIQUE	PROS	CONS
EEG	Reflects quick changes in the brain, inexpensive, not invasive, safe, little discomfort	Difficult to know which brain areas produced the EEG
MEG	Reflects quick changes in the brain, not invasive, safe, no discomfort	Basic equipment is expensive
MRI and fMRI	More exact location of structure and activity, safe, little discomfort	Basic equipment is expensive, cannot be used with people who have any metal in their body (heart pacemaker or metal pins), fMRI not able to measure short-term changes in the brain
PET	Able to measure specific neurotransmitters	Basic equipment is expensive, injection of radioactive tracers limits number of scans per year, not able to measure short-term changes in the brain