

# THIS IS YOUR..... BRAIN ON PIANO

## PLAYING THE PIANO ..... IS FUN .....

but check out all the things your  
brain is doing at once!

### EYES

Sight-reading on the piano involves reading two lines of music, each in a different clef.

VISUAL CORTEX

OCCIPITAL LOBE

### EARS

Pianists listen to notes being played and adjust their playing accordingly.

AUDITORY CORTEX

TEMPORAL LOBE

### 2 HANDS

Both hands often play intricate rhythms independently from each other.

PRIMARY MOTOR CORTEX

PREFRONTAL CORTEX

CEREBELLUM

### KEEPING TIME

Pianists accurately "keep time" by synthesizing and synchronizing all sensory input and motor activity. In addition, they are able to subdivide the beat in a myriad ways.

PREFRONTAL CORTEX

CEREBELLUM

### 10 FINGERS

Very few, if any, instruments require the use of all ten fingers.

PRIMARY MOTOR CORTEX

PREFRONTAL CORTEX

CEREBELLUM

### SPATIAL

Pianists know where all the notes are without having to look at the piano keyboard.

PARIETAL LOBE

CEREBELLUM

RIGHT HEMISPHERE

### ARTISTIC INTERPRETATION

Pianists transmit emotion by capturing the mood, style, and tempo of a song, using performance techniques such as dynamics, articulation, rhythm, and expressive timing.

PREFRONTAL CORTEX

### PROPRIOCEPTION

Pianists are aware of the relative position of neighbouring parts of their body and the strength of effort being employed in movement.

CEREBELLUM

### 2 FEET

The left foot is used to operate the left una corda pedal and the right foot is used to operate the sustain pedal.

PRIMARY MOTOR CORTEX

PREFRONTAL CORTEX

CEREBELLUM

### TOUCH

Pianists use touch to determine how much force is needed to press the piano keys and foot pedals.

PARIETAL LOBE

Playing the piano activates the brain in ways no other game, gadget, instrument or tool can. It's the total brain workout!