ImPACT concussion test
Sampling of the six phases: Athletes take test when healthy for baseline, and again when injured

1. WORD DISCRIMINATION
One at a time, 12 random, simple words appear for 1.5 seconds apiece. Then the same 12 words appear again for 1.5 seconds.

Water  House  Can  Nurse  Car  Lead  Ice

Individual words then appear, and you have to remember if each was one of the original words, clicking yes or no with a mouse.

2. DESIGN MEMORY
One at a time, 12 random squiggly patterns appear for 1.5 seconds apiece. Then the same 12 appear again for 1.5 seconds.

Individual patterns then appear, and you have to remember if each was one of the original ones, clicking yes or no.

3. X’S AND O’S
A screen with about 30 X’s and O’s appears. Three of the letters are yellow, the rest are black.

Then there’s a speed test in which you hit the Q button as quickly as possible when a red circle appears, or the P button when a blue square appears.

The original X’s and O’s screen reappears, and you have to remember which three were yellow by clicking on them.

4. SYMBOL MATCHING
Nine boxes have a shape inside, and each is numbered. A single shape appears below, and you have to click number of the box that matches it.

After matching the shapes 27 times, the shapes disappear from the top box, and you have to remember where the shape was and click on the box.

5. COLOR MATCH
Three colored squares, either blue, red or green, appear on the screen. Another square appears below, and you have to click the color that matches.

Next you see blue, red or green boxes with a word inside. If the box color, word color and the word all match, you click in the box as quickly as possible.

If all three components don’t match, you don’t click.

6. THREE LETTER MEMORY
You are shown three letters in boxes and are asked to remember them.

You then have to remember the three letters and type them in the boxes.

THE FINAL TEST
Once all phases are completed — after about 20 minutes — you have to repeat phases 1 and 2 to see how many of the words and squiggly patterns you can remember.

Mirror graphic by Cory Giger/Photos courtesy St. Francis University