Questions for chapter 2 audio slides

1. What are the main reasons for measurement within motor learning and performance?

2. What’s the difference between performance outcome and performance production measures? Give an example of each. Which type of measure is best for technical diagnosis of performance errors?

3. What is a fore-period, in reaction time terms? Give an example of a fore-period in real life.

4. Describe the difference between simple and choice RT.

5. Error Scores: Assume that the straight horizontal line (marked “T” for target) is a target line, and the dots represent errors from that target. You have 4 attempts at 4 throws. Errors above the line are positive and those below the line are negative. (Assume that the target line is midway up the side of the box)

   ![Graph with points A, B, C, D]

   Now answer the following:
   a. Which of ABCD has the smallest constant error?
   b. Which of ABCD has the largest constant error?
   c. Which of ABCD has the smallest variable error?
   d. Which of ABCD has the largest variable error?
   e. Which of ABCD has the smallest absolute error?
   f. Which of ABCD has the largest absolute error?

6. Explain why RMSE is comparable to AE.

7. What’s the difference between kinematics and kinetics?

8. The following two diagrams depict a person taking a free throw in basketball. Each shows the same throw, but in different ways. The first shows the elbow and knee angles relative to time, and the second shows them relative to each other. **Your task is to imagine what this person’s three-point shot would look like, and sketch it on both charts (the purpose of this is just to get an idea of how each of the charts works, in terms of displaying data).** Both joint angles are taken so
that larger angles imply extension of the joint (straightening) while smaller measures imply flexing (bending).

**Figure 1:** Position-time graph for elbow, shoulder and knee joint angles during a basketball free throw (from Satern & Keller-McNulty, 1992)

**Figure 2:** Angle-Angle diagram for same shot