

Quiz 3

- Which of the following is **NOT** a factor influencing simple reaction time
 - a. Familiarity of signal
 - b. Gender
 - c. Age
 - d. Alertness level

Ans: B

- Choice RTs are longer than simple RTs
 - a. True
 - b. False

Ans: True

- Drawing can be an indicator of the cognitive level of a child
 - a. True
 - b. False

Ans: True

- Despite its later contradictions, which theory was consistent with Hick-Hyman's law?
 - a. Computational learning theory
 - b. Automata theory
 - c. Information theory
 - d. Coding theory

Ans: C information theory

- S-R compatibility is defined by the relation between the stimulus location and the anatomical identity of the hand making the response.
 - a. True
 - b. False

Ans: False

- The principle that states that equal angles are drawn in equal times is called _____ principle.

Ans: Isogeny

- According to the 2/3rd Power Law, when we draw a curve, the angular velocity of the pen increases linearly with the curvature
 - a. True
 - b. False

Ans: False

- The _____ hemisphere of the brain is specialized for language, in general

Ans: Left

- Which Hemisphere is responsible for Intuitive and non-verbal thoughts _____

Ans: Right

- According to the rate scaling principle, writing rate is directly proportional to the writing speed
 - a. True
 - b. False

Ans: False

- Which of the following is **not** a writing stage?
 - a. Phoneme
 - b. Grapheme
 - c. Allographs
 - d. Words

Ans: Phoneme

- Which of the following explains the $\frac{2}{3}$ power law?
 - a. Oscillation model
 - b. Angular velocity theory
 - c. Cognitive processing theory
 - d. Anatomical curvature model

Ans: A

- “Marco dreams of going abroad” represents which error?
 - a. Lexical
 - b. Letter substitution
 - c. Allographic error
 - d. Letter repetition

Ans: B

- According to the rate scaling hypothesis, writing rate is directly proportional to
 - a. Writing speed
 - b. Dominant hand
 - c. Precision grasp
 - d. Writing size

Ans: d

- The iterative corrections model can be used to explain Fitts law
 - a. True
 - b. False

Ans: True

- Medial temporal region of the brain help on motion planning
 - a. True
 - b. False

Ans: False

- “Its two hard to understand”--- What kind of writing error is associated with “two”

Ans: Lexical/Word

- Robust relationship between geometrical and temporal aspects of human movement is described by–
 - a. Hook's Law
 - b. Fitt's Law
 - c. $\frac{2}{3}$ Power Law
 - d. Law of Reciprocity

Ans: C

- What is 'A' in $\frac{2}{3}$ Power Law: $A(t) = kC(t)^{2/3}$?
 - a. Curvature
 - b. Power Unit
 - c. Empirical Constant
 - d. Angular Velocity

Ans: D

- Hick-Hayman law describes how much decision time it takes for a person to make a decision as a result of the possible choices,
 - a. True
 - b. False

Ans: True

- According to the SNARC effect, we can respond first to the smaller number with our right hand
 - a. True
 - b. False

Ans: False

- The difficulty with using basic grammar and syntax, or word order and sentence structure known as _____

Ans: Agrammatism

- _____ is responsible for planning and reaching

Ans: parietal reach region/Pre-motor cortex /Motor cortex

- Can we calculate Movement Time from the given equation?

$a + b \log_2 (2 D (\text{Distance}) / W (\text{Width}))$

- a. Yes
- b. No

Ans: Yes

- _____ is a hand posture with which objects can be held and it does not involve hand orientation

Ans: Grasping

- Depending on how the image is perceived the rules pertaining to starting stroke may change
 - a. True
 - b. False

Ans True

- Depending on how we plan a trajectory using hand space, joint space changes
 - a. True
 - b. False

Ans: True

- _____ is learning ability disorder that mainly results in impaired writing ability

Ans: Dysgraphia

- Perception precedes response selection
 - a. True
 - b. False

Ans: true

- Response selection precede response programming
 - a. True
 - b. False

Ans: True

- _____ involves distinguishing among two or more stimuli and choosing the response according to stimuli

Ans: Choice reaction time

- Select correct option
Choice RT _____ with the increase in number of stimuli-responses
 - a) increases
 - b) decreases
 - c) does not change

Ans: Increases

- When two stimuli of the same category are presented and mapped to the same response, then it involves
 - a. Response processing
 - b. Stimulus processing

Ans Response processing

- _____ effect suggests that left hand response is faster to smaller numbers and right hand response is faster to larger numbers

Ans SNARC effect

- _____ is type of grasping in which the movement is evoked with the help of arms

- a. precision grasping
- b. intermediate grasping
- c. Power grasping

Ans power grasping

- Simple Reaction Time tasks involve mapping of single stimulus to a single response
 - a. True
 - b. False

Ans True

- What parts of the cortex or stream is responsible for visually guided actions _____

Ans: Dorsal pathway

- True or False:
While doing a motion, it takes less time for eyes to form a saccade in comparison to muscle movement

Ans: True

- Reaction times are _____ when individual stimuli and responses match than when they do not match.

Ans: Faster/Lower

- The extent of movement is planned in advance of the movement itself.
 - True
 - False

Ans: True

- Choose the correct order between stimulus and response
 - a. Response Selection->Perception->Response Programming
 - b. Perception->Response Selection->Response Programming
 - c. Response Programming->Response Selection->Perception
 - d. Perception->Response Programming->Response Selection-

Ans: B Perception->Response Selection->Response Programming

- What is the approximate time for performing an action with visual feedback and taking advantage of it
 - a. ~100ms
 - b. ~220ms
 - c. ~200ms
 - d. ~150ms

Ans: C 200ms

- According to Fitt's law, movement time is _____ proportional to the size of the target and _____ proportional to its distance.
 - a. Directly, Inversely
 - b. Directly, Directly
 - c. Inversely, Inversely
 - d. Inversely, Directly

Ans: Inversely, Directly

- Which of the following is a power grasping movement:
 - a. Holding a pen
 - b. Holding a cup
 - c. Holding a coin
 - d. None of the above

Ans: Holding a cup

- Reaching action is made up of _____ and _____

Ans: Transport/movement, Grasping

- As the number of choices increases, the reaction time increases:
 - a. Linearly
 - b. Quadratically
 - c. Logarithmically
 - d. None of the above

Ans: C: Logarithmically