Tips For Using An Audience Response System

Construct good questions:
- Short questions and brief options
- Number all answers to match the keypads (A-I or 1 – 9)
- For a 45-minute presentation, you should use no more than 5 or 6 questions, depending on the type of presentation
- Space the questions out

Build in one or two minutes for presenting and polling and 2-3 for discussion.
Use questions to see what the audience knows before you teach it and then use a different form of the question after teaching the material to assess what they know after the teaching.
Anticipate possible responses and be prepared to discuss.

Uses for Clickers during a lecture:
- Explore pre-existing knowledge
- Activate learning (trigger discussion, identify important areas, generate need to know, ow)
- Check for or promote understanding and give feedback
- Practice solving problems
- Identify values, attitudes, and opinions
- Get feedback from learners
<table>
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<tr>
<th>Type of Question</th>
<th>Sample Questions</th>
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| **Knowledge:** Requires cognitive function and memory of knowledge learned. | 1. Which of the following pathways represents the feedback for the hypothalamic-pituitary axis in the disease described?  
2. A patient develops Horner’s syndrome and has symptoms of diaphoresis. Which tumor is most likely? |
| **Comprehension:** Requires further understanding other than memorization. | 1. Which of the following historical factors is key to the diagnosis?  
2. The child in the above scenario is exhibiting behaviors consistent with which of the following diagnoses? |
| **Application:** Require problem solving and use of prior information. | 1. The patient presents to the emergency room with acute onset of dizziness and loss of consciousness. Which is the most appropriate next step?  
2. Which of the following is the best dose for this 10 month old infant weighing 10 kilograms? |
| **Analysis:** Encourage higher level of clinical reasoning or problem solving. | 1. If your patient has fruity order to his breath, which of the following results of the laboratory tests would you expect to see?  
2. Which of the following statements describes why the diagnosis is not pseudotumor cerebri? |
| **Synthesis:** Promotes creativity, connection and construction of new ideas. | 1. Which of the following research methods would help to identify the cure to this cancer? |
| **Evaluation:** Promotes decision-making, conclusions, opinions. | 1. Rate your agreement with the statement using the following scale.  
2. Review the sample progress note and rate the quality using the scale below. |

1. Rate your agreement with the statement using the following scale.  
2. Review the sample progress note and rate the quality using the scale below.
References:


University of New Mexico, School of Medicine. Teacher and Educational Development. A Division of Educational Development and Research. Integrating Advances in Technology and Education Using An Audience Response System (ARS) To Promote Interest and Enhance Learning