# Effective Multiple Choice Questions

Using multiple choice questions provides an efficient and effective way to assess a wide range of knowledge, skills, attitudes and abilities (Haladyna, 1999).

In a multiple-choice question, when is the longest answer the correct answer?

- A. Rarely
- B. Sometimes
- C. It's common for it to be the correct answer, and it's often stuffed with new information that should have gone in the main part of the course but we forgot so now we're putting it in the quiz because we can't possibly leave out the tiniest detail
- D. Occasionally

When is it NOT a good idea to avoid negative questions?

- A. Never
- B. Sometimes
- C. Always
- D. What?

How often is the correct choice "A"?

- A. Usually
- B. Frequently
- C. Often
- D. Almost never, because if "A" is the right answer, then the learner doesn't have to read all the other options we spent so much time writing and revising, and where's the return on investment in that?

When is "All of the above" the correct answer?

- A. With alarming regularity
- B. When we try to cover too much in one question
- C. When we use a question to teach instead of assess
- D. All of the above

I opened an online course on a topic I know nothing about, clicked through without reading anything, and took the assessment. I passed! What does that suggest?

- A. I am a genius!
- B. The assessment was too easy.
- C. Maybe the online course was too easy, too.
- D. Maybe the course didn't even need to be written.
- E. B, C, and D

We can confuse learners when we:

- A. fail to actually complete the sentence we started in the question.
- B. inconsistent grammar in the options.
- C. sometimes we veer off into another idea entirely.
- D. wombats.

Does your class intellectually engage your students and deepen their conceptual understanding and critical thinking ability or does it re-enforce the memorization of facts and declarative knowledge?

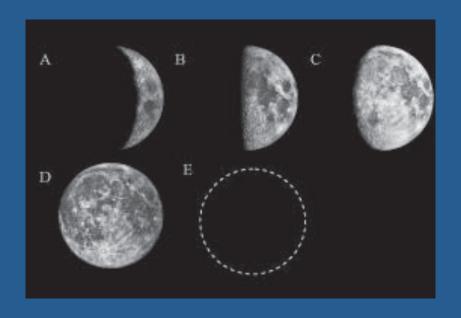
Bloom's Taxonomy of evaluation Educational Objectives synthesis analysis application comprehension declarative knowledge

The Role of Assessment in the Development of the College Introductory Astronomy Course A "How-to" Guide for Instructors. <u>Astronomy Education Review</u>, 1(1), 1-24, 2002. G. Brissenden, T.F. Slater, and R. Mathieu.

#### Around which object does the Moon orbit?

- A. Earth
- B. Mars
- C. Jupiter
- D. Saturn

You look to the eastern horizon as the Moon is rising and discover that it is in the new moon phase. Later that same day when the moon is setting, which of the moon phases shown below would the Moon have looked like?



You look to the west at 10am and see the moon on the horizon. What is the phase of the moon that will be high in the sky in three weeks?

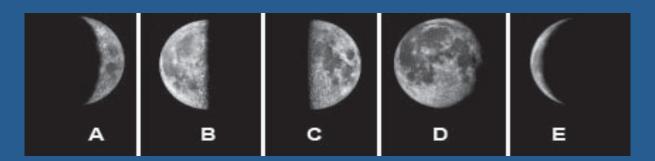
- A. Waning Gibbous
- B. Waxing crescent
- C. New
- D. Waxing Gibbous
- E. Waning Crescent

#### Six hours after the moon rises where would you look to see it?

- A. North
- B. East
- C. South
- D. West

If the Moon is in the Waxing Gibbous phase today, approximately how long will it be until the Moon is in the Waxing Crescent phase?

- A. a day
- B. one week
- C. three weeks
- D. two weeks
- E. a month



If the moon is in the waxing gibbous phase today, how many of the moon phases shown above (A-E) would the moon go through during the next 10 days.

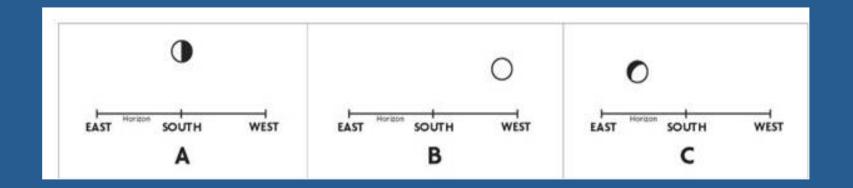
A.only one

B.Two

C.Three

D.more than three

E. none



#### Which of the situations shown above occurs at a time closest to sunset?

#### Which of the following groups of moon phases can be above the horizon at 4pm?

- A. Full, Waning Crescent, and Waxing Gibbous
- B. New Moon, First Quarter, and Waxing Gibbous
- C. Waxing Gibbous, Full Moon, Waning Gibbous
- D. Waxing Crescent, Third Quarter, Waxing Gibbous
- E. None. The moon is only visible above the horizon during the night time.