Using Quizzes for Retrieval Practice

What is Retrieval Practice?
Retrieval practice, also known as the testing effect, is the active process of recalling - or retrieving - information from memory and using it. By exercising our memory, we improve it. Recalling information takes mental effort and that effort helps us grow as learners. Actively practicing recalling information, which is more cognitively demanding than re-reading and taking notes, invites more long-term learning because of the effort involved on the learner’s part.

Quizzes as a Form of Retrieval Practice
Quizzes can be useful tools to enable students’ long-term learning. Because quizzes ask students to recall information and use it, they can be useful retrieval practice for students. Below are some tips and suggestions to consider when using quizzes for retrieval practice.

1. Quizzes should be low stakes (or no stakes) so students are not punished for not mastering material as they are learning it.
2. Quizzes should be spaced out and used often enough to promote learning. We don’t want our students cramming for an exam, so model distributive practice and studying by spreading out frequent quizzes (or other forms of retrieval practice).
3. The questions should be challenging enough so that learners struggle a bit to retrieve and use information.
4. Provide feedback as soon as possible. Students need to learn from their mistakes and not reinforce incorrect answers. Ask students to spend some time working on questions they answered incorrectly.
5. Vary up quizzes with implementing gamed-based formats (e.g., Jeopardy), allowing students to work in teams (after individually answering questions), or finding other ways to make it more engaging.
6. Quizzes can be implemented before, during, or after class. Consider using technology to make collection easier; options include Canvas, a student-response system (e.g., iClicker, Top Hat), or using a polling tool (e.g., Zoom’s polling feature, Mentimeter).
7. Reinforce WHY you’re asking students to take multiple quizzes. Be transparent about how retrieval practice can assist their learning. Better yet, ask them to do some reflection and metacognitive thinking on how their study habits have improved because of the retrieval practice.