



Guidelines to prepare **MCQ** final exam on Blackboard

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Content:

- Working with **pools**
 - Creating new pools
 - Editing existing pools
 - Exporting pools
 - Importing pools

- Creating the exam
 - Adding new questions
 - Using “**Set questions**” type
 - Using questions from existing pools

- Deploying the exam
 - Create content area for the exam
 - Adding the exam

Describing the Blackboard interface

1. Main Window

Top menu

Assessments

2. Edit mode button

Mode **ON**

Mode **Off (students vue)**

3. Content area

A link to our final exam must be added here

4. Blackboard tools

Course Tools

Survey, tests and pools

The screenshot displays the Blackboard interface for a course titled '(1) كيمياء عامة (General Chemistry (1))'. The interface is divided into several sections:

- Top menu:** Includes 'Build Content', 'Assessments', 'Tools', and 'Partner Content'.
- Edit mode button:** Located in the top right corner, labeled 'Edit Mode is: ON'.
- Main window:** The central area displaying course content, including:
 - Unit 1:** Chemistry The Study of Change
 - Unit 2:** Atoms Molecules and Ions
 - Unit 3:** Electronics structure of atoms, Periodic Relationships Among the Elements
 - First midterm exam:** Covering units 1, 2 & 3, Date: 15/3/2020
 - Unit 4:** Mass Relationships in Chemical Reactions
- Blackboard tools:** A sidebar on the left containing:
 - Course Management:** Home page, Syllabus, Content, Announcements, Course Messages, Email, Contacts, Homework, Evaluation, Blogs, Pearson, Virtual Classroom.
 - Control Panel:** Content Collection, Course Tools, Evaluation, Grade Center.

Annotations in the image highlight specific features:

- A red box highlights the 'Edit Mode is: ON' button, labeled '2 Edit mode button'.
- A red box highlights the 'Content' menu item in the sidebar, labeled '3 Content area'.
- A green box highlights the 'Course Tools' section in the sidebar, labeled '4 Blackboard tools'.

Working with *pools*

From Course Tools menu choose:
“**Tests, Surveys, and Pools**” link

The screenshot displays the Blackboard Course Management interface. On the left, the 'Course Management' sidebar is visible, with the 'Course Tools' menu item circled in red and labeled with a red '1'. A red arrow points from this menu item to the right. The main content area on the right lists several course items, each with a folder icon: 'First midterm exam' (covering units 1, 2 & 3, dated 15/3/2020), 'Unit 4' (Mass Relationships in Chemical Reactions), 'Unit 5' (Gases), 'Unit 6' (Thermochemistry), 'Second midterm exam' (covering units 4, 5 & 6, dated 12/4/2020), and 'Unit 7' (Physical properties of solutions). The 'Unit 7' item is highlighted with a purple bar at the bottom and labeled with a red '2'.

Working with *pools*

From the Main Window choose:
“**Pools**” link

The screenshot displays the Blackboard user interface. At the top, the course name '(1) كيمياء عامة (General Chemistry (1))' is shown next to a dropdown arrow, followed by the page title 'Tests, Surveys, and Pools'. On the left, a dark sidebar contains a list of navigation links: 'Home page', 'Syllabus', 'Content', 'Announcements', 'Course Messages', 'Email', 'Contacts', 'Homework', 'Evaluation', 'Blogs', 'Pearson', and 'Virtual Classroom'. The 'Pools' link is circled in red, and a red arrow points to it from the right. The main content area on the right is titled 'Tests, Surveys, and Pools' and contains three sections: 'Tests' (describing graded question sets), 'Surveys' (describing ungraded anonymous question sets), and 'Pools' (describing question sets for tests or surveys). The 'Pools' section title is also circled in red.

Working with *pools*

In the Main Window will appear all your pools:

To create New Pool click on **Build Pool**

Pools
Pools are sets of questions that you can use in multiple tests or surveys. You can import pools from outside the system and export th...

Build Pool Import Pool

NAME ▲	NUMBER OF QUESTIONS	DATE LAST EDITED
Chap-3 M	144	March 13, 2020 4:45 PM
Chapt-3 D	19	March 13, 2020 4:45 PM
Chapt-3 E	30	March 13, 2020 4:50 PM
Gases 1-2-3 Topics Medium	120	April 2, 2020 5:52 PM
Gases Test Difficult	17	April 2, 2020 5:03 PM
Gases test Easy	25	April 2, 2020 5:02 PM
103_Chem_Chapter_01_pool_1	12	June 5, 2017 10:44 PM
103_Chem_Chapter_02_Pool_1	10	April 10, 2020 5:16 PM

Working with *pools*

In the Main Window will appear the pool information

- ☐ Enter the pool **name**
- ☐ You can enter also any **description** or/and any **instructions**
- ☐ Then click on **Submit**

POOL INFORMATION

* Name

Chapter 1 Easy

Description

For the toolbar, press ALT+F10 (PC) or ALT+FN+F10 (Mac).



Path: p

Instructions



Path: p

Click **Submit** to proceed.

Cancel

Submit

Working with *pools*

In the Main Window will see that you **successfully** created your first pool but as you can see it's **empty**!

- ☐ We can **create** new question
- ☐ Or **find** existing questions
- ☐ Or **upload** questions

We will start by creating new question

Success: Chapter 1 Easy created.

Pool Canvas: Chapter 1 Easy

The Pool Canvas presents an inventory list of questions that can be managed and searched individually. [More Help](#)

Create Question Find Questions Upload Questions


Description	
Instructions	
Total Questions	0
Total Points	0

Working with *pools*


By clicking on “**Create** question”, all the type of questions will appear but you have only one choice for this final exam: **Multiple Choice**

Then click on it.


Success: Chapter 1 Easy created.

Pool Canvas: Chapter 1 Easy 

The Pool Canvas presents an inventory list of questions that can be managed individually. [More Help](#)

Create Question  Find Questions Upload Questions

- Calculated Formula
- Calculated Numeric
- Either/Or
- Essay
- File Response
- Fill in Multiple Blanks
- Fill in the Blank
- Hot Spot
- Jumbled Sentence
- Matching
- Multiple Answer
- Multiple Choice**

 This is our MCQ type

Working with *pools*

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You must enter the

Question **Text**

and you can omit the Question **Title**

As you can see, many **Formatting** features are present in the editor.

Your question is more **complex** to be edited by these features **!!!!**

No Problem

Create/Edit Multiple Choice Question

Multiple Choice questions allow students to choose one correct answer from a selection of answers. Up to 100 answers can be added to the question.

* Indicates a required field.

QUESTION

Question Title

Iron density



Not mandatory

* Question Text

For the toolbar, press ALT+F10 (PC) or ALT+FN+F10 (Mac).



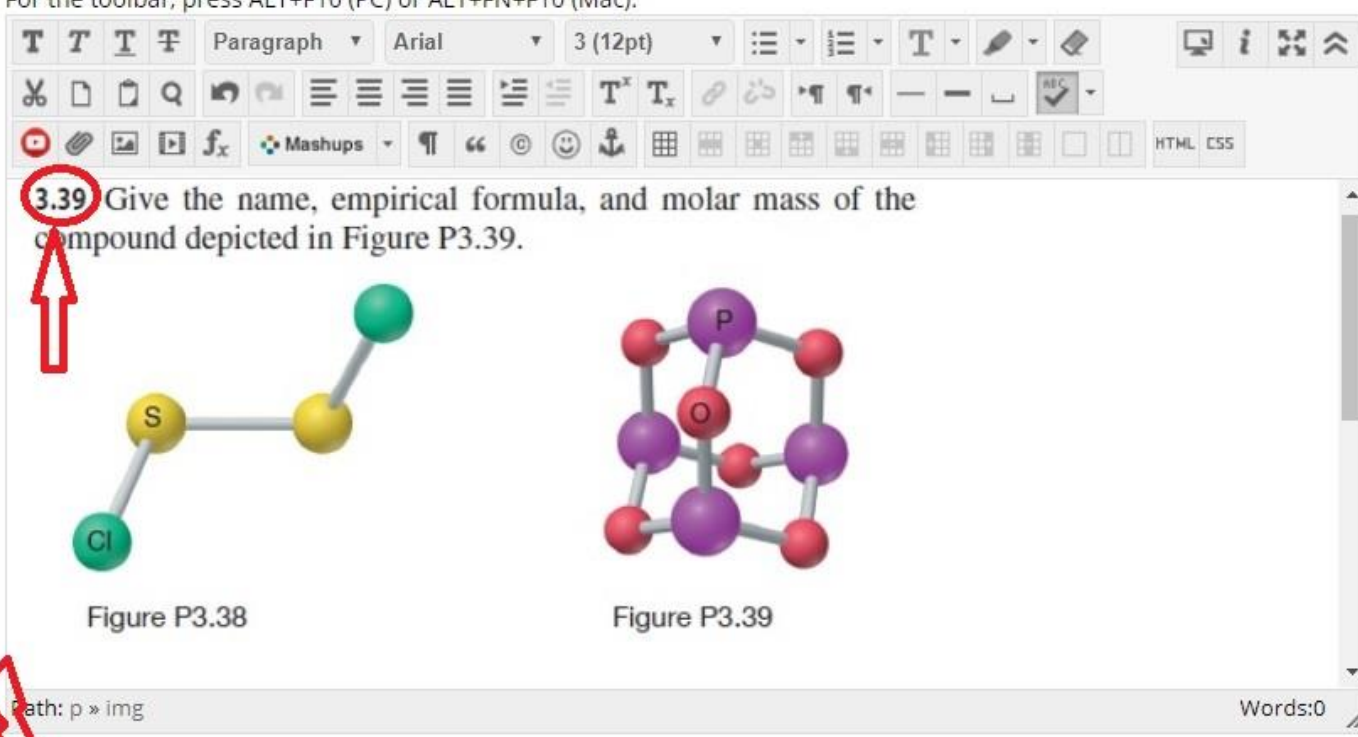
Iron has a density of 7.9 g cm³. What is the mass (in g) of a cube of iron with the length of one side equal to 27 mm ?

Working with *pools*

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Take **SnapShot** in your pdf book and past it in **Paint** for any necessary editing or just save it as **jpeg** image and import it in the Question Text

* Question Text
For the toolbar, press ALT+F10 (PC) or ALT+FN+F10 (Mac).



3.39 Give the name, empirical formula, and molar mass of the compound depicted in Figure P3.39.

Figure P3.38

Figure P3.39

Path: p » img

Words:0

OPTIONS

Working with *pools*

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Or just **attach** your question
as **pdf** file.

Once your question
entered go down to select
the **Options**

* Indicates a required field.

QUESTION

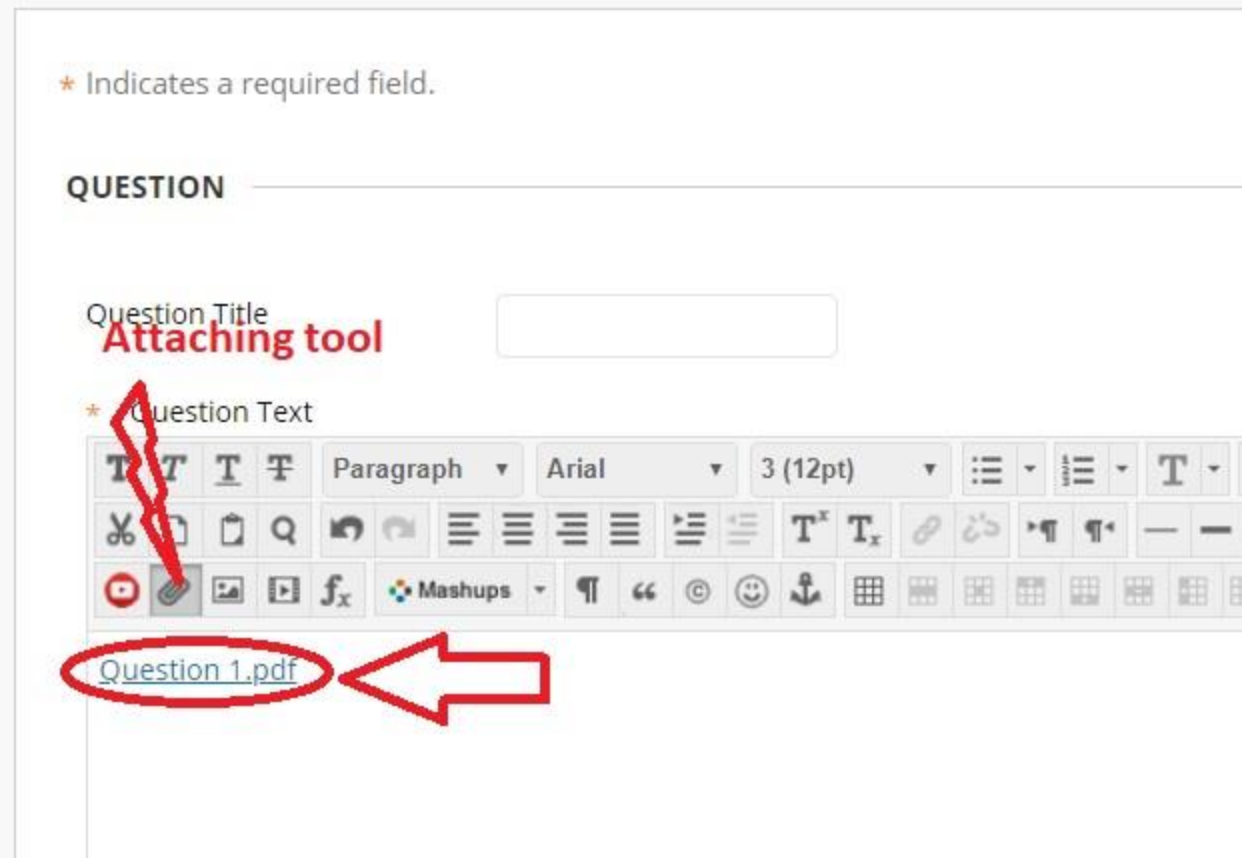
Question Title

Attaching tool

* Question Text

Paragraph Arial 3 (12pt)

Question 1.pdf

A screenshot of a web-based question entry form. The form has a 'QUESTION' section with a 'Question Title' text box and a 'Question Text' text area. The 'Question Text' area has a rich text editor toolbar above it. A red arrow points from the text 'Attaching tool' to the 'Attach' icon (a paperclip) in the toolbar. Another red arrow points from the text 'Question 1.pdf' to the 'Attach' icon. The text 'Question 1.pdf' is circled in red.

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- ☐ Choose **Uppercase Letters**
- ☐ And **Vertical** answer orientation
- ☐ If your final answer (answer 4) is not of the type “All the **above**” then
Check the small square to
randomize the answers.
- ☐ Enter answer **1** as **correct** answer
and answers **2, 3 and 4** as false
answers.

4/21/2020

Working with *pools*

In the Options we can also:

- ☐ Add **feedback** for correct answer
- ☐ Add **feedback** for incorrect answers
- ☐ Add Categories, Topics or **Levels Difficulty**

Then we click **Submit**

CATEGORIES AND KEYWORDS

Click **Add** to add a Category, Topic, Level of Difficulty, or Keyword to the question. Click the X icon to remove it. Click an existing entry to access a complete list of Categories, Topics, Levels of Difficulty, or Keywords.

Categories	None	Add
Topics	None	Add
Levels of Difficulty	None	Add
Keywords	None	Add

Click **Submit** to proceed. Click Submit and Create Another to save this question and create another of the same type.

Cancel

Submit and Create Another

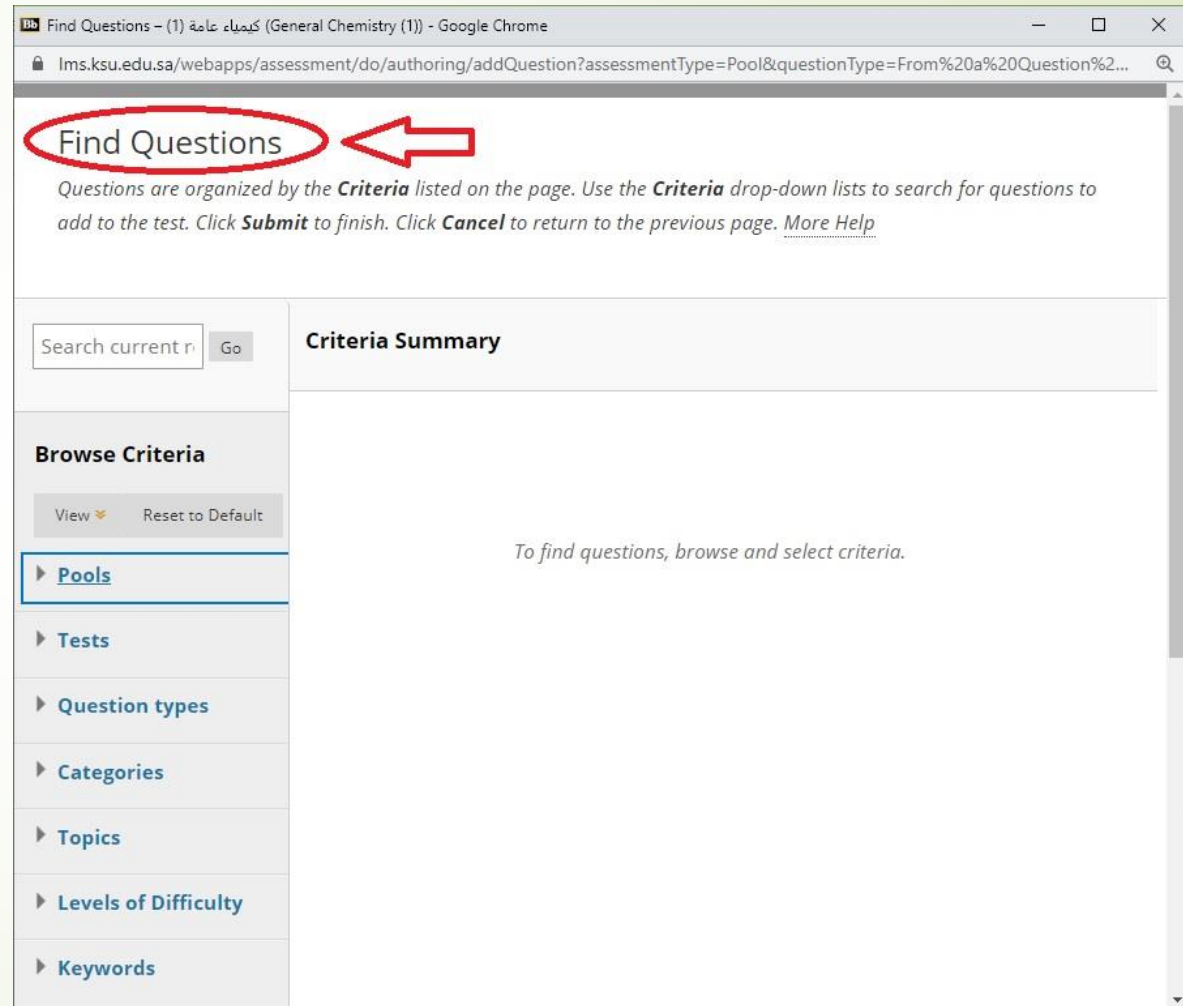
Submit

Working with *pools*

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The **second way** to add questions is to **find** them in my:

- ❑ Existing **Pools**
- ❑ And **Tests**
- ❑ By using many filters:
 - ❑ Questions types
 - ❑ Topics
 - ❑ Levels of Difficulty



Working with *pools*

To find Questions:

1. Select the **Pool(s)** where to search
2. Add **filters** (for example Questions Type: **MCQ**)
3. Select your questions and submit

Find Questions – (1) كيمياء عامة (General Chemistry (1)) - Google Chrome

lms.ksu.edu.sa/webapps/assessment/do/authoring/addQuestion?assessmentType=Pool&questionType=From%20a%20Question%20...

Find Questions

Questions are organized by the **Criteria** listed on the page. Use the **Criteria** drop-down lists to search for questions to add to the test. Click **Submit** to finish. Click **Cancel** to return to the previous page. [More Help](#)

Search current r Go

Criteria Summary

Pools **Chap-3 M**

Browse Criteria

View Reset to Default

Pools

- ☐ All Pools
- ☒ **Chap-3 M** 1
- ☐ Chap-3 D
- ☐ Chap-3 E
- ☐ Gases 1-2-3 Topics Medium
- ☐ Gases Test Difficult
- ☐ Gases test Easy
- ☐ 103_Chem_Chapter_01_pool_1

keywords

Displaying 1 to 25 of 144 items

<input type="checkbox"/>	QUESTION TEXT	QUESTION TYPE	POINTS	SOURCE NAME	SOURCE TYPE
<input type="checkbox"/>	Calculate the average atomic mass of lithium using the following data:	2 Multiple Choice	10	Chap-3 M	Pool
<input checked="" type="checkbox"/>	How many moles of phosphine (PH ₃) are produced for every 4.0 moles of hyd...	Multiple Choice	10	Chap-3 M	Pool
<input checked="" type="checkbox"/>	A 0.600 g sample of a compound of arsenic and oxygen was found to contain ...	Multiple Choice	10	Chap-3 M	Pool

3

Working with *pools*

Your pool is ready and you can
(if necessary)

☐ **Delete** selected questions

☐ **Update Points** for selected questions

Once finished click on **OK**.

Description

Instructions

Total Questions 30

Total Points 60

Criteria Summary

Question types All Pool Questions

Browse Criteria

► Question types

Displaying 26 to 30 of 30 items

◀◀ Page 2 of 2

<input type="checkbox"/>	QUESTION TEXT	QUESTION TYPE	DEFAULT POINTS
<input type="checkbox"/>	Calculate the molecular mass, in g/mol, of C ₆ H ₁₂ O ₆ .	Multiple Choice	<input type="text" value="2"/>
<input type="checkbox"/>	How many Mg atoms are present in 170 g of Mg?	Multiple Choice	<input type="text" value="2"/>
<input type="checkbox"/>	Calculate the mass of 3.7 moles of Br ₂ .	Multiple Choice	<input type="text" value="2"/>
<input type="checkbox"/>	Calculate the molecular mass of ethylene glycol, C ₂ H ₆ O ₂ , a compou...	Multiple Choice	<input type="text" value="2"/>
<input type="checkbox"/>	Select True or False: The definition of a mole is an Avogadro's number of ...	True/False	<input type="text" value="2"/>

◀◀ Page 2 of 2

Displaying 26 to 30 of 30 items

← OK

Working with *pools*

You can **Edit** any pool :



1. **Click** on the small arrow
2. **Select Edit**

Pools

Pools are sets of questions that you can use in multiple tests or surveys. You can import

Build Pool

Import Pool

NAME 	NUMBER OF
Chap-3 M	144
Chapt-3 D	19
Chapt-3 E	30
Gases 1-2-3 Topics Medium 	120
Gases Test Difficult	17
Gases test Easy	25
103_Chem_Chapter_01_poo	12
103_Chem_Chapter_02_Poo	10
Algorithmic questions	5
Ch_03_Thermochemistry	35
Ch_04_Properties of Solutions	22

1



Edit

2



Working with *pools*



You can **Export** any pool :

1. **Click** on the small arrow
2. Select **Export** to Local Computer and share it by Email
3. Or Export it to your “**Content Collection**” and share its **Link**

Pools

Pools are sets of questions that you can use in multiple tests or surveys. You can import

Build Pool Import Pool

NAME 	NUMBER OF
Chap-3 M	144
Chapt-3 D	19
Chapt-3 E	30
Gases 1-2-3 Topics Medium 	120
Gases Test Difficult	17
Gases test Easy	25
103_Chem_Chapter_01_poo	12
103_Chem_Chapter_02_Poo	10
Algorithmic questions	5
Ch_03_Thermochemistry	35
Ch_04_Properties of Solutions	22

1

2

Export to Local Computer

Export to Content Collection

Copy

Add Alignments

Add Alignments to Questions

Working with *pools*

When you **Export** any pool :

1. **Don't** open it: Just save it as single **ZIP** file.
2. If you are using **macOS** and you get problems with import/export pool then use **Windows** system.

Working with *pools*

You can **Import** any pool :

1. Click on **Import Pool**.
2. Then **Browse** your Computer to find the pool and attach it.
3. Then **Submit**.

Pools

Pools are sets of questions that you can use in multiple tests or surveys. You can import pools from outside the system

Build Pool

Import Pool



NAME ▲

NUMBER OF QUESTIONS

Chap-3 M

144

Chapt-3 D

19

Chapt-3 E

30

Gases 1-2-3 Topics Medium

120

Gases Test Difficult

17

Gases test Easy

25

Working with **pools**

How many **pools** must be created?

1. At least one by **Chapter**.

In this case the **level of difficulty** must be indicated for each question created.

2. The **Best choice** is **3** x Number of chapters

1. Chapter X **Easy** (**X = 1, 2, 3,**)
2. Chapter X **Medium**
3. Chapter X **Difficult**

Creating the exam

To create the exam :

1. Click on **Tests**

Tests, Surveys, and Pools

Tests

Tests are sets of questions that are graded to measure student performance. (Note: This is a screenshot of a software interface, so the text is partially cut off.) Test results are reviewed in the Grade Center. Note that some question types are not available for tests.

Surveys

Surveys are not graded, and student responses are anonymous. They are useful for gathering feedback on course content. Surveys can be deployed in a content folder for students to respond to the survey.

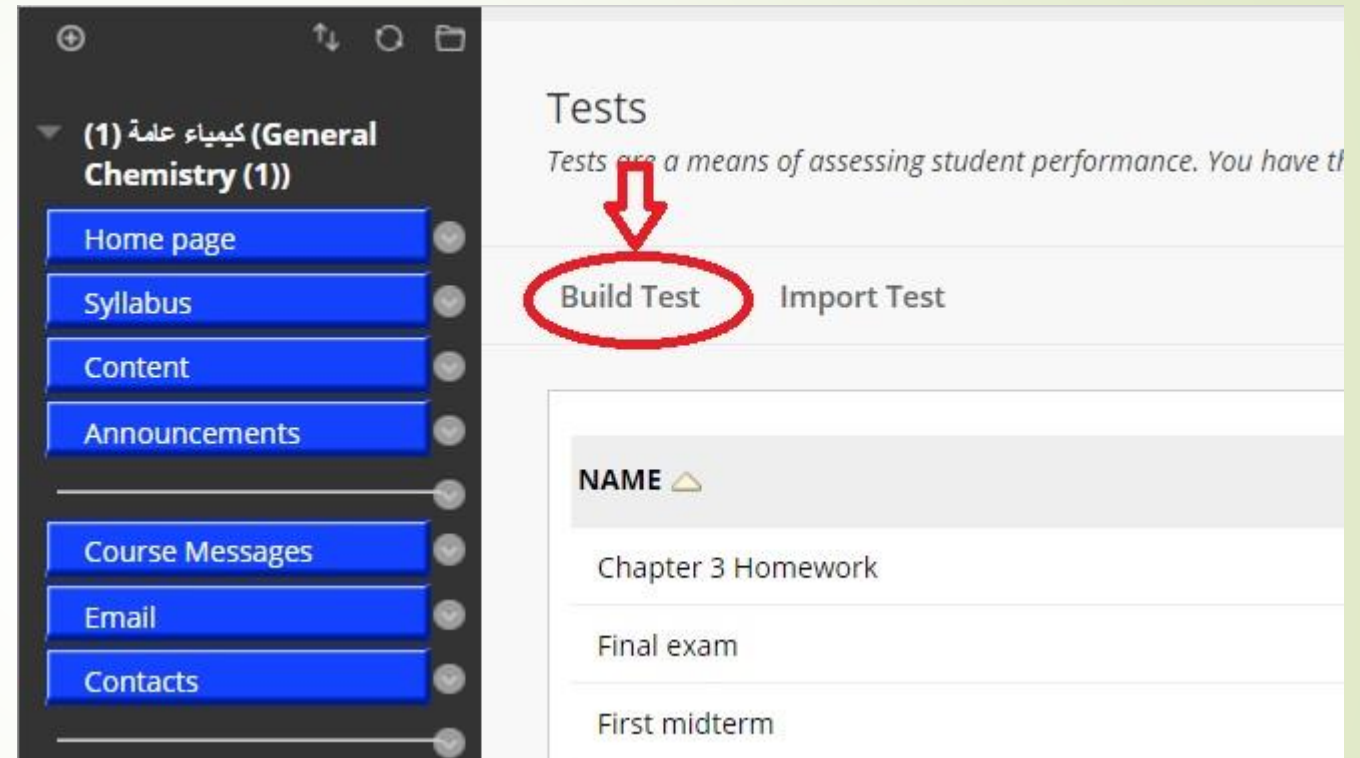
Pools

Pools are sets of questions that can be added to any Test or Survey. Pools are useful for creating question banks.

Creating the exam

To create the exam :

2. Click on **Build Test**



The screenshot displays a course management interface. On the left, a sidebar menu for '(1) كيمياء عامة (General Chemistry (1))' lists various course components: Home page, Syllabus, Content, Announcements, Course Messages, Email, and Contacts. On the right, the 'Tests' section is visible, with a red arrow pointing to the 'Build Test' button, which is circled in red. Below the 'Build Test' button, a list of existing tests is shown: 'Chapter 3 Homework', 'Final exam', and 'First midterm'.

Creating the exam

To create the exam :

3. Enter the **Name** of your Test
4. And any **Description** and/or **Instructions**
5. Then **submit**

TEST INFORMATION

★ Name

Description

For the toolbar, press ALT+F10 (PC) or ALT+FN+F10 (Mac).

Paragraph Arial 3 (12pt)

Path: p

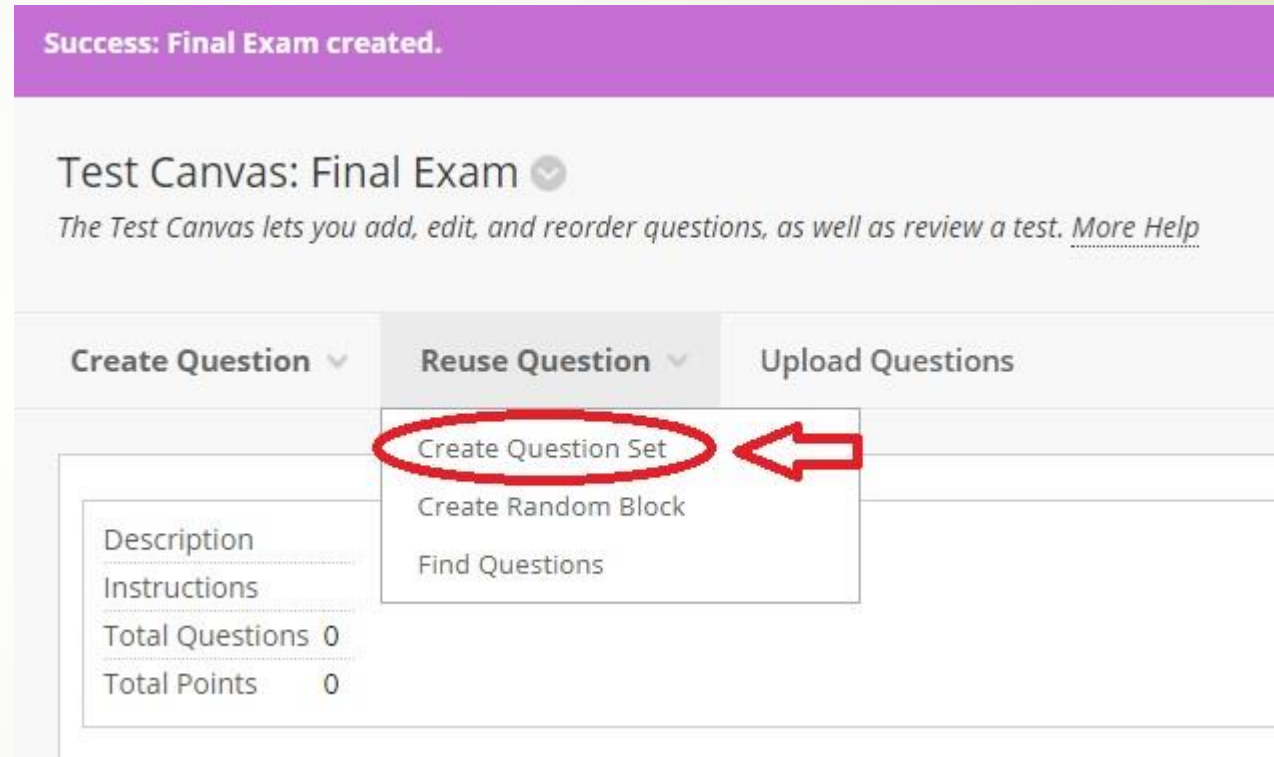
Instructions

Creating the exam

To create the exam :

6. From **Reuse Question**
select :

“Create Question Set”



Creating the exam

To create the exam :

7. Select the **Pool**
8. Check the **small box** in the top to select all questions
9. Click on **Submit** in the Right Down Corner

Create Question Set

Question sets are groups of questions that can be presented in a random fashion determined by the instructor. [More Help](#)

Search current r... Go

Criteria Summary

Pools Gases test Easy

Browse Criteria

View Reset to Default

Pools

- ☐ All Pools
- ☐ Chap-3 M
- ☐ Chapt-3 D
- ☐ Chapt-3 E
- ☐ Gases 1-2-3 Topics Medium
- ☐ Gases Test Difficult
- ☒ Gases test Easy
- ☐ 103_Chem_Chapter_01_pool_1

Criteria Summary

Displaying 1 to 25 of 25 items

QUESTION TEXT	QUESTION TYPE	SOURCE NAME	SOURCE TYPE
Select True or False: A "gas" is a substance in which the molecules are S...	True/False	Gases test Easy	Pool
What is the pressure (in atmospheres) of the sample of gas trapped in the...	Multiple Choice	Gases test Easy	Pool
A sample of pure nitrogen has a	Multiple	Gases test	Pool

Creating the exam

To create the exam :

10. Edit the **Number of Questions to display** randomly from the 25 questions
11. Repeat all the previous steps (from 6 to 10) to add other Question Set
12. Click on **OK** in the Right Down Corner

The screenshot shows a web interface for creating an exam. At the top, there are filters: 'Select: All None' and 'Select by Type: - Question Type -'. Below these are buttons for 'Delete', 'Points' (with an input field), 'Update', and 'Hide Question Details'. A section titled '1. Question Set' contains a purple success message: 'Success: Question set saved with 25 questions. Edit number of questions to display and points.' Below the message, a table shows 'Total Questions: 25' and 'Number of Questions to display: 1'. A red arrow points to the '1' in the 'Number of Questions to display' field. At the bottom of this section is a link 'Questions in the Set'.

Select:	All	None	Select by Type:	- Question Type -
Delete	Points	Update	Hide Question Details	

1. Question Set

Success: Question set saved with 25 questions. Edit number of questions to display and points.

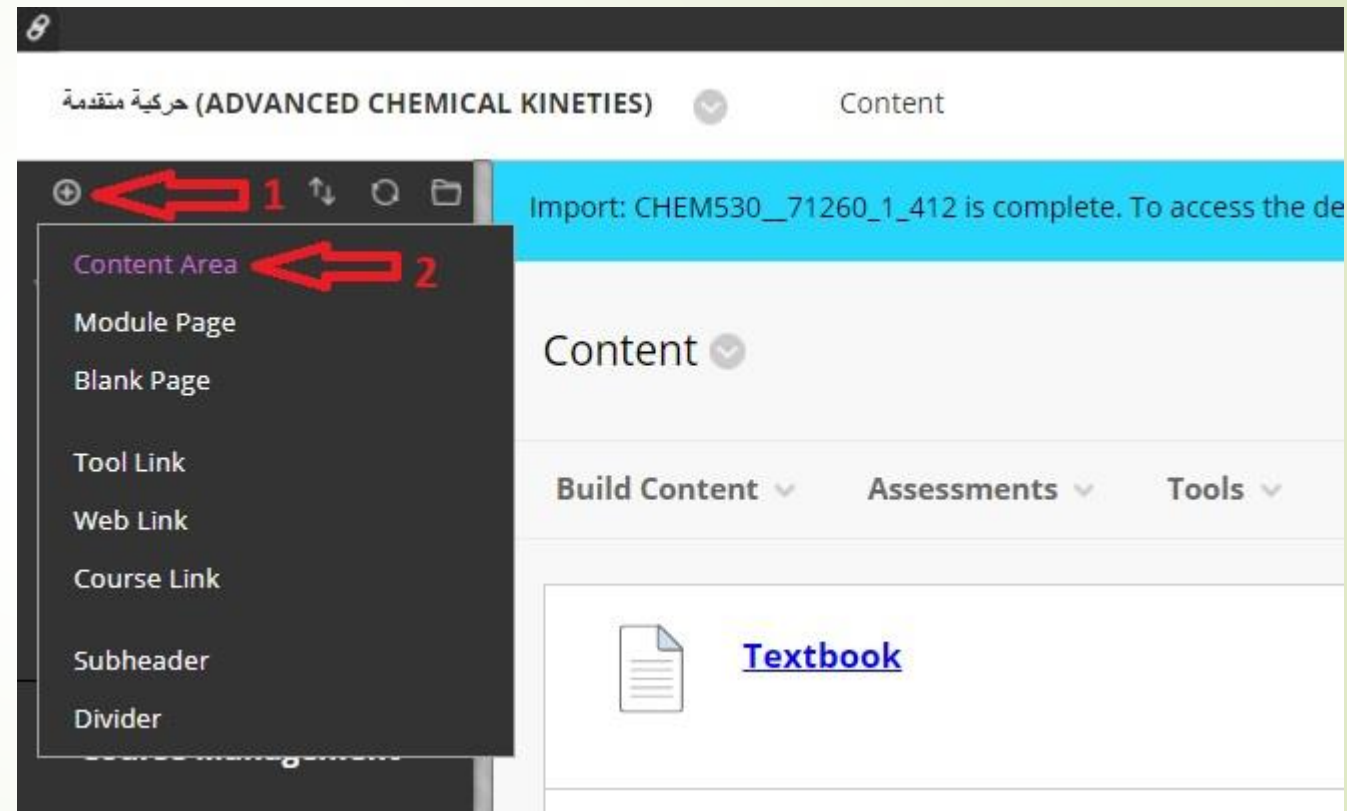
Total Questions:	25
Number of Questions to display:	1

Questions in the Set

Deploying the exam

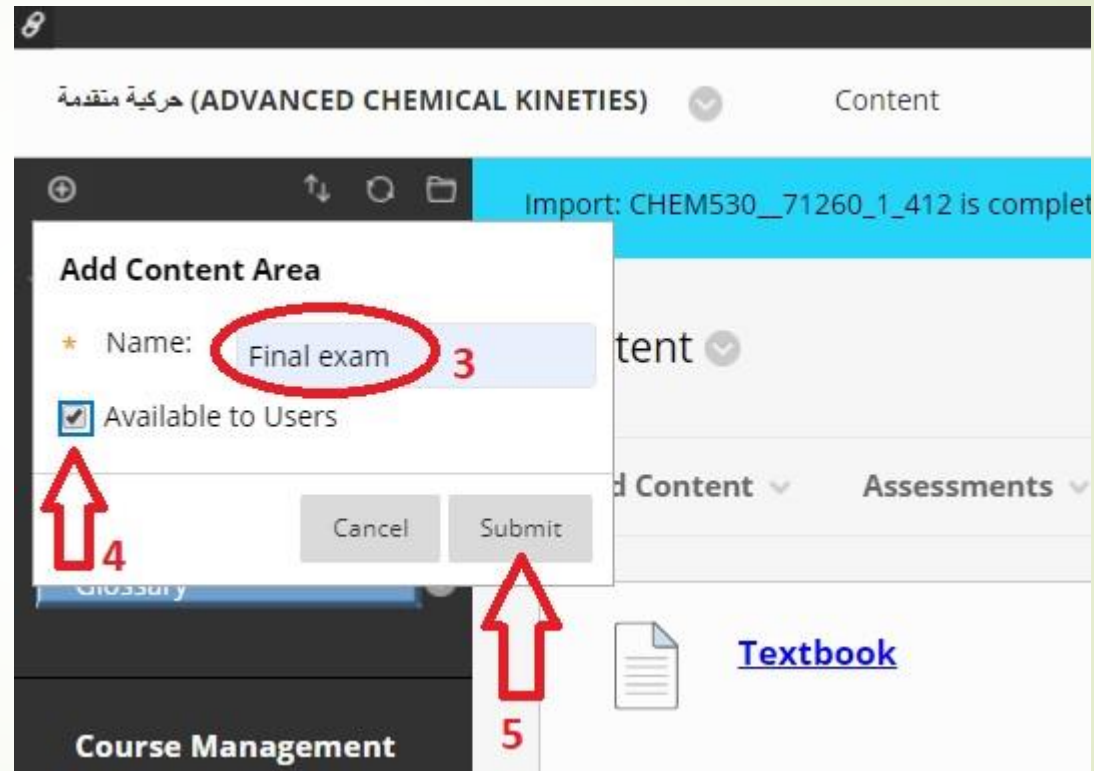
To make the exam available to students, we must deploy it:

1. Click on the **small +**
2. And choose **Content Area**



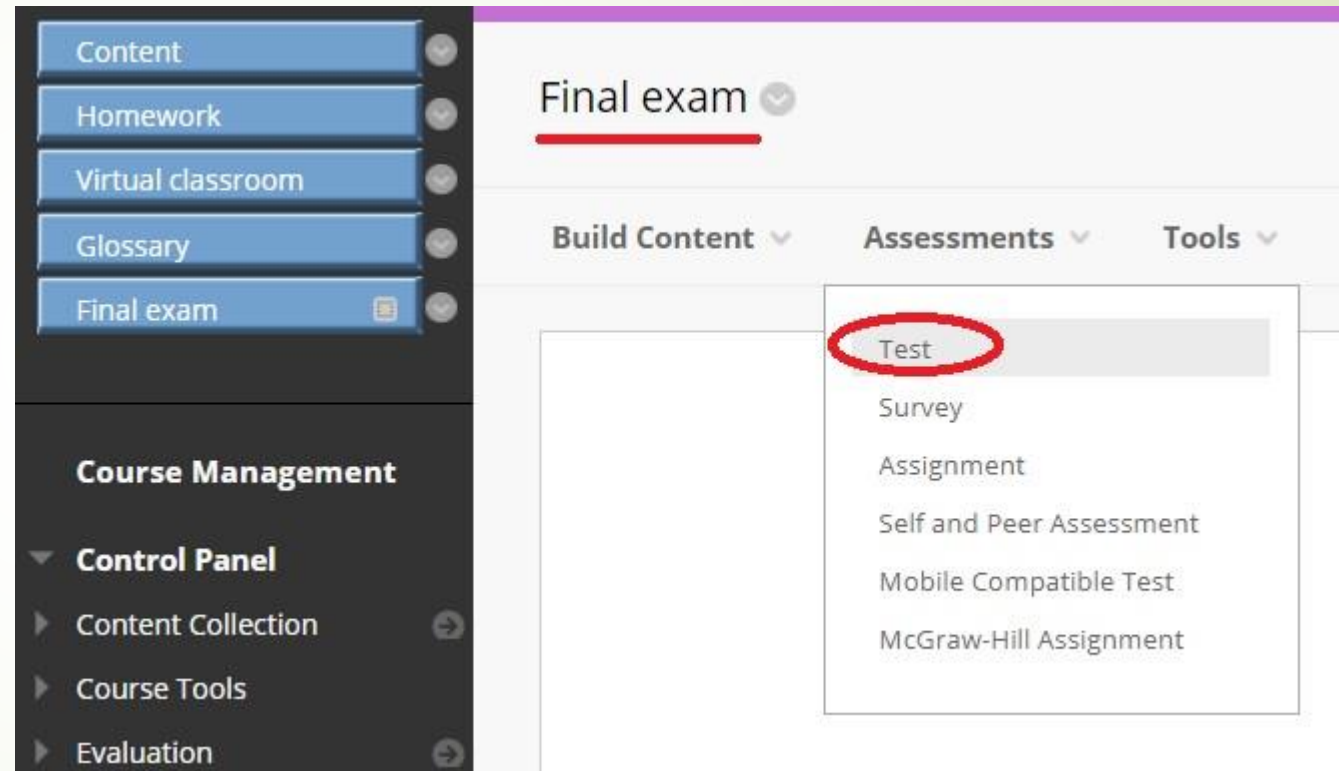
Deploying the exam

3. Enter the **name**
4. And check the small box
Available to Users
5. Click **Submit**



Deploying the exam

6. Click on content area created
7. And from Assessment choose **Test**



Deploying the exam

8. Choose **Final Exam** from the list.

9. And click **Submit**

ADD TEST


Create a new test or select an existing test to deploy.

Create a New Test


Add an Existing Test

-- Select Test Below --

Final exam



Click **Submit** to add this test. Click **Cancel** to quit.



Deploying the exam

Our **Final Exam** is successfully created.

Now we must edit

Test Options according to the **College directives**

Success: Final exam created.

Test Options ←

Test options control the instructions, availability, due dates, feedback, self-assessment and presentation of the test. M...


* Indicates a required field.

TEST INFORMATION

* Name

Choose Color of Name Black

Content Link Description



Deploying the exam

10. Choose **Yes** to make the link available.
11. Check **Multiple Attempts**
12. Enter **2** for the number of Attempts
13. Choose the **Highest Grade**
14. Set **Timer** to the allowed time and make

TEST AVAILABILITY

Make the link available ☒ Yes ☐ No

Add a new announcement for this test ☐ Yes ☒ No

☒ Multiple Attempts ☐ Allow Unlimited Attempts ☒ Number of Attempts

Score attempts using

Last Graded Attempt

Last Graded Attempt

Highest Grade

Lowest Grade

First Graded Attempt

Average of Graded Attempts

☐ Force Completion
Once started, this test must be completed

☒ Set Timer
Set expected completion time. Selecting this option also records completion time for this test. Students will see this time before they begin the test.

Minutes

Auto-Submit ☐ OFF ☒ ON

OFF: The user is given the option to continue after time expires.
ON: Test will save and submit automatically when time expires.

Click **Submit** to edit options for this test. Click **Cancel** to quit.

Cancel Submit

Working with *pools*

Then be sure to check

“Include this Test in Grade Center score calculations”

SELF-ASSESSMENT OPTIONS

If this test is a self-assessment, choose to include or hide the scores in the Grade Center. After it was hidden, all prior attempts will be deleted.



☒ Include this Test in Grade Center score calculations

Grade Center items excluded from summary calculations are also excluded from weighting. Items included in calculations and other weighted items are not, grade weight calculations will be based on the items included in calculations.

☐ Hide results for this test completely from the instructor and the Grade Center

If this option is selected, the instructor will not be able to see any student grades, view answers, or view result details. To protect student privacy, this choice cannot be reversed later without deleting the test.

Working with *pools*

At the end we must:

☐ Choose

One at a Time

☐ And check

Prohibit Backtracking

☐ And check

Randomize Questions

Then we click **Submit**

TEST PRESENTATION

☐ All at Once

Present the entire test on one screen.

☒ One at a Time

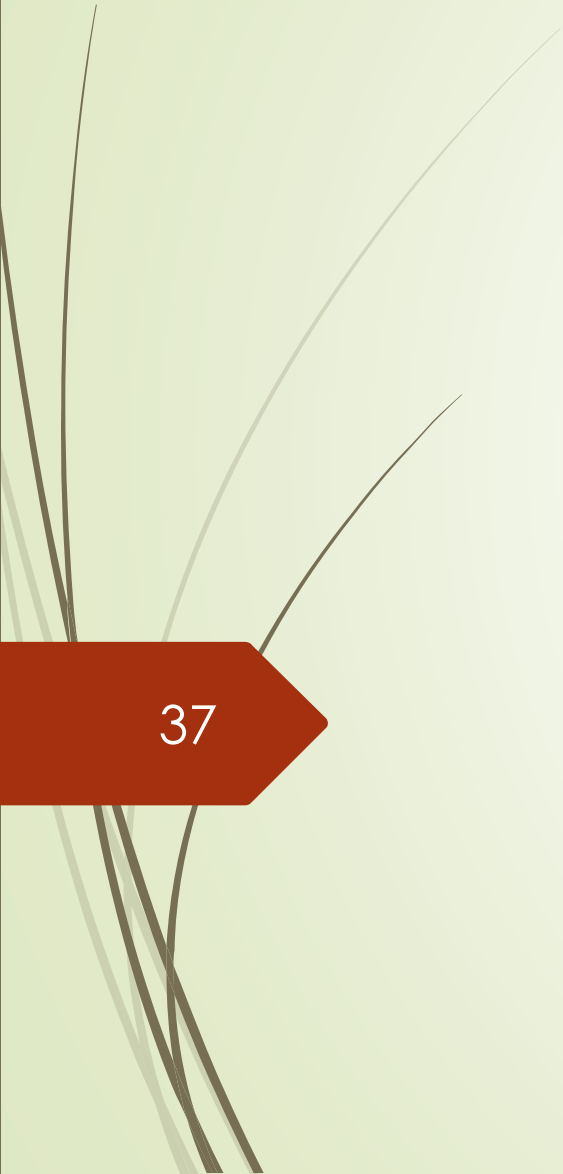
Present one question at a time.

☒ Prohibit Backtracking

Prevent changing the answer to a question that has already been submitted.

☒ Randomize Questions

Randomize questions for each test attempt.



Thank you very much for your attention

Dr. Ammar Tighezza