

Field	Required?	Identifier 2	Unique?	Limit	Case sensitive?	Illegal characters	Special character rules	Submission Guidelines
Knewton Client ID	Yes	Yes	Yes	N/A	Yes	Double quote (")		Your integration team will provide this ID for you as part of the build process. You may fill this in with whatever alphanumeric ID you'd like to assign to your Content Inventory.
Partner Inventory ID	Yes	Yes	Yes	N/A	Yes	Double quote (")		- This ID is equivalent to "graph_id" in the Knewton API. Every cell in row 3 of the Content Inventory is considered a Superheader. Superheaders group categories of content data (e.g. "Atom Taxons"). - Each Superheader therefore must be placed directly above its corresponding Headers (e.g. the "Atom Taxons" Superheader must be placed directly above every column used to submit an Atom Taxonomy).
Superheader	N/A	N/A	N/A	N/A	Yes	Any discrepancy from the template		Every cell in row 6 of the Content Inventory is considered a Header. Headers specify what type of content data (e.g. "Atom Name", "Learning Objective ID") is contained by the corresponding column of the spreadsheet.
Header	N/A	N/A	N/A	N/A	Yes	Any discrepancy from the template For Taxonomies: - Double quote (") - Colon (:) - Comma (,)		
Atom ID	Yes	Yes	Yes	40,000 (Atoms and Containers total)	Yes	Backslash as last character (\) Double quote (")		If you think your content will exceed the entity limit, please consult your integration team. We will work with you on a solution.
Atom Name	Yes			40,000 (Atoms and Containers total)	Yes			Atom names should be in a human-readable format, e.g., "Chapter 2, Reading Quiz Question 3." - If you think your content will exceed the entity limit, please consult your integration team. We will work with you on a solution.
Atom Type	Yes			N/A				Must be one of three values: - Instructional - Assessment - Both
Atom URL				N/A				If available, link to the assessment or instruction content.
Instructional Text				N/A				If available, include the full instructional text of the Atom here.
Question Stem				N/A				If available, include the full text of the Question Stem here.
Answer/Choice				N/A				If available, include the full text of the answer or answer choice here. Screenshots, text rendered as images, and other image-based answers cannot be submitted.
Correct Answer				N/A				If available, include the correct answer choice or full text of the correct answer itself here. Images cannot be submitted.
Explanation				N/A				- Any Correct Answer must accurately reflect your content. If available, the full text of the explanation here. Images cannot be submitted.
LO ID		Yes	Yes	N/A	Yes	Tilde (~) Colon (:) Pipe () Backslash (\) Backslash (\) last character Comma (,) Double Quote (")		Must be consistently spelled, punctuated, and capitalized. - Short IDs that reflect your content structure (e.g. LO-01, ALG-24, GR7_CH01_LO03) work best. Cannot be submitted without corresponding ID.
LO Description				N/A	Yes			- Must be consistently spelled, punctuated, and capitalized. - Detailed, human-readable descriptions of concrete student learning outcomes work best.
LO Type					Yes	There are only three valid values: "REMEMBER", "UNDERSTAND" and "APPLY"		This column is only required for "fact-based" domains/subjects, where students need to learn e.g. facts and definitions as well as demonstrating a skill; if your content is focused on skills (e.g. math), you do not need to use this column.
[Atom Taxon]		Yes		55 per Atom 2,000 unique Taxons total 7 levels per Taxonomy	Yes	Name of the column = Name of the Taxonomy. You own this name. Illegal characters in the Name of the taxonomy: Tilde (~) Colon (:) Pipe () Backslash (\) Backslash (\) last character Comma (,) Double Quote (") For the taxon values, a comma (,) is a valid character; it will be escaped in the graph. Double quotes (") and backslashes (\) are illegal. - Must be consistently spelled, punctuated, and capitalized. - If you think your Taxonomies will exceed entity limits, please consult your integration team. We will work with you on a solution.	Pipe (): Knewton always interprets a pipe as the separation between two levels of the Taxonomy. Tilde (~): Knewton always interprets a tilde as the end of one Taxon value and the start of another Taxon value. Space: Knewton treats spaces within Taxons as distinct characters. If two Taxon values are identical in the Content Inventory, but one contains a space in the middle of it and the other does not, then Knewton will interpret these as two entirely different Taxons. Leading or Trailing Space: Knewton always removes spaces at the start or end of a value when processing Inventories.	Name of the column = Name of the Taxonomy. You own this name. Illegal characters in the Name of the taxonomy: Tilde (~) Colon (:) Pipe () Backslash (\) Backslash (\) last character Comma (,) Double Quote (") For the taxon values, a comma (,) is a valid character; it will be escaped in the graph. - Must be consistently spelled, punctuated, and capitalized. - If you think your Taxonomies will exceed entity limits, please consult your integration team. We will work with you on a solution.
Pool Size				N/A		Anything that is not a positive integer		If you are using algorithmic questions, then the value for Pool Size should reflect the number of times an algorithmically generated version of that question can be seen before the question would feel repetitive to a learner. - If you are not using algorithmic questions, then do not include Pool Size in your Content Inventory.
Difficulty				N/A		Any character that is not a number between 1 and 3, inclusive		If you have tagged your assessments with difficulty levels, you should normalize these values to a scale of 1-3.
Recommendable				N/A		Anything that is not "Yes" or "No"		This cell should be blank for all instructional content. Must have a value of "Yes" or "No".
Container ID		Yes		40,000 (Atoms and Containers total)	Yes	Backslash as last character (\) Double quote (")		Must be consistently spelled, punctuated, and capitalized for all instances of a given Container ID. - If you think your content will exceed the entity limit, please consult your integration team. We will work with you on a solution. Cannot be submitted without corresponding ID.
Container Name				40,000 (Atoms and Containers total)	Yes			- Must be consistently spelled, punctuated, and capitalized for all instances of a given Container name. - If you think your content will exceed the entity limit, please consult your integration team. We will work with you on a solution. Cannot be submitted without corresponding ID.
Container URL				N/A				- Container URL must link to the correct assessment or instruction. - Each time a Container appears in the graph, enter the same URL in this field.

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[Container Taxon]	Yes			55 per Atom 2,000 unique Taxons total 7 levels per Taxonomy	Yes	Colon (:) Backslash (\) Backslash (\) last character Escaped Comma (,) Double Quote (")	<p>Pipe (): Knewton always interprets a pipe as the separation between two levels of the Taxonomy.</p> <p>Tilde (~): Knewton always interprets a tilde as the end of one Taxon value and the start of another Taxon value.</p> <p>Space: Knewton treats spaces within Taxons as distinct characters. If two Taxon values are identical in the Content Inventory, but one contains a space in the middle of it and the other does not, then Knewton will interpret these as two entirely different Taxons.</p> <p>Leading or Trailing Space: Knewton always removes spaces at the start or end of a value when processing Inventories.</p>	<p>Name of the column = Name of the Taxonomy. You own this Name.</p> <p>Illegal characters in the Name of the taxonomy: Tilde (~) Colon (:) Pipe () Backslash (\) Backslash (\) last character Comma (,) Double Quote (")</p> <p>For the taxon values, a comma (,) is a valid character; it will be escaped in the graph.</p> <p>- Must be consistently spelled, punctuated, and capitalized. - If you think your Taxonomies will exceed entity limits, please consult your integration team. We will work with you on a solution.</p>

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Prereq Learning Objective ID		Yes	Yes	N/A	Yes	Tilde (~) Colon (:) Pipe () Backslash (\) Backslash (\) last character Comma (,) Double Quote (")		Must be consistently spelled, punctuated, and capitalized on both the Content Inventory and the LO-LO Map sheets. - Short IDs that reflect your content structure (e.g. LO-01, ALG-24, GR7_CH01_LO03) work best.
Prereq Learning Objective description				N/A	Yes			Cannot be submitted without corresponding ID. - Must be consistently spelled, punctuated, and capitalized. - Detailed, human-readable descriptions of concrete student learning outcomes work best.
Postreq Learning Objective ID		Yes	Yes	N/A	Yes	Tilde (~) Colon (:) Pipe () Backslash (\) Backslash (\) last character Comma (,) Double Quote (")		Must be consistently spelled, punctuated, and capitalized on both the Content Inventory and the LO-LO Map sheets. - Short IDs that reflect your content structure (e.g. LO-01, ALG-24, GR7_CH01_LO03) work best.
Postreq Learning Objective description	For any row with data on the LO-LO Map, all the fields must be populated; otherwise, leave blank.			N/A	Yes			Cannot be submitted without corresponding ID. - Must be consistently spelled, punctuated, and capitalized. - Detailed, human-readable descriptions of concrete student learning outcomes work best.
Strength				N/A	Yes	All but S, W, Q		Must be one of capital S for Strong edge, capital W for Weak edge, or capital Q for sequence edge.