



STUDY GUIDE

Certified Pommelier™

Pre-requisite: You must be a Level 1 Certified Cider Professional to sit for the Certified Pommelier™ exam.

About: Certified Pommelier™ is akin to Certified Cicerone® for beer or Certified Sommelier for wine. It is a level between the introductory and advanced levels. Certified Pommeliers™ have detailed knowledge that improves their cider service in a food or beverage setting. The knowledge gain at this level is also beneficial to marketers, journalists, retailers and distributors. The end goal is to educate customers on the diversity and nuances of the vast but misunderstood cider category.

Certified Pommeliers™ must have a fundamental understanding of the topics covered in Level 1, but at a deeper, more detailed level. The exam consists of five types of questions: short answer, fill in the blank, matching, essay and sensory (based on tasting). The test is meant to be challenging. Studying is highly recommended. The topics covered in the exam are:

1. Apples, the Orchard & History
2. Cider Making
3. Evaluation
4. Families & Flavor
5. Keeping & Serving
6. Food & Cider

The following document outlines topics a test-taker will want to thoroughly review before attempting the exam. Most topics are covered in readily available cider texts. See our book guide for references. Some topics are outlined in detail in study handouts on the the CCP website: www.ciderassociation.org/certification

Apples, the Orchard & History: You must be able to do the following regarding the character of the listed apples: understand their character and role in various cider styles, assign them to their region of origin and assign them to class (bittersharp, bittersweet, sweet or sharp). The Certified Pommelier™ exam covers US and UK apples, as well as a small number from other regions. You should also know the names of any of the apple varieties included in the USACM Style Guidelines and know the cider style with which they are most associated.

The classes¹ are as follows:

<u>Class</u>	<u>Acidity (total acidity)</u>	<u>Tannins (total polyphenols)</u>
Sharp	over 4.5 g/L	less than 2 g/L
Bittersharp	over 4.5 g/L	over 2 g/L
Sweet	less than 4.5 g/L	less than 2 g/L
Bittersweet	less than 4.5 g/L	over 2 g/L

See Apples to Know on Page 3.²

¹ These classifications are based on those developed by the Long Ashton Research Station in the UK at the beginning of the 20th century taking into account typical amounts of acid and tannins. Other traditional cidermaking countries have similar classification systems and specific regional varieties used for cider. It should be clearly understood that the absolute amounts of acid and tannin in a given apple will be impacted by the region in which it was grown based on differences in climate, soils, and orchard practices. Thus, an apple that would be classified as a bittersharp in one region may well be a bittersweet in another, or a sharp grown in an arid climate with little or no irrigation may produce enough tannin to be classified as a bittersharp. This is roughly analogous to what one would expect to see in wine grapes where, for example, a pinot noir grape grown in Sonoma County, CA would generally have lower acid levels than one grown in the Bordeaux region of France.

² Apple references:

The New Cider Maker's Handbook, A Comprehensive Guide for Craft Producers by Claude Jolicoeur (2013)

Cider Hard & Sweet: History, Traditions, and Making Your Own by Ben Watson, 3rd edition (2013)

Apples to know for the Certified Pommelier™ exam

. Know the following apples to region and to class.

Sharp

United States:

Black Twig
Gold Rush
Golden Russet
Harrison
Honeycrisp
McIntosh
Newtown Pippin
Northern Spy
Roxbury Russet
Wickson
Winesap

United Kingdom:

Tom Putt
Brown's Apple
Ashmead's Kernel

Other:

Gravenstein (Netherlands, possibly Italy)
Granny Smith (Australia)

Bittersharp

United States:

Hewe's Virginia Crab

United Kingdom:

Kingston Black
Porter's Perfection
Foxwhelp (not to be confused with Geneva Foxwhelp)
Stoke Red

Sweet

United States:

Gala
Red Delicious
Fuji
Jonathan
Golden Delicious
Jonagold

Bittersweet

United Kingdom:

Yarlington Mill
Dabinett
Bulmers Norman

Pear varieties Be able to class these varieties to their broader category, coordinating perry styles and the impact their properties have on perry:

o **Tannic Pears:** Barland, Butt, Hendre Huffcap, Gin, Brandy, Blakeney Red, Thorn, Moorcroft

o **Culinary Pears:** Bartlett, Bosc, Comice, D'anjou, Seckel

In addition, know these red-fleshed varieties: Niedzwetzkyana, Geneva Crab, Redfield, Hidden Rose®

History of cider and orcharding practices:

- Know the traditional cider making processes by region
- Know the different harvest techniques by region
- Know the evolutionary history of the apple
- Understand the current US apple market—orcharding protocols, growing regions and top varieties
- Understand the basic climate requirements for growing apples and how variation may impact apple characteristics

Additional terms and concepts to know as related to apples and orcharding: Sugars, Fructose, Tannins, Sorbitol, Acid, Malic Acid, Brix, Grafting, Pome, Quince, Starch, Rootstock, Scion, Terroir

Cider Making: Be able to list and describe cider processing steps, as well as unique processing choices made for different regions and styles (some concepts also covered in style section).

Additionally, understand how these flaws occur in cider making:

- Oxidation
- Hydrogen sulfide
- Cork taint
- Diacetyl
- Acetyl aldehyde
- Extreme Acetification
- Mousiness
- Burn Match
- Extreme Volatile Phenols

Additional Production Concepts to Know:

- Be able to describe the differences between making beer and making cider.
- Be able to describe the differences between making wine and making cider.
- Be able to explain the following carbonation techniques: force carbonated, bottle conditioned (synonyms: *méthode ancestral*, ancestral method, *pétillant naturel* (Pét-Nat)), Charmat, and traditional method (synonym: *méthode Champenoise*).
- Understand processes and cider making choices impacting the stability of cider.
 - Use of sulfur in cider making
 - Filtering
 - Pasteurization
- Describe the impact bacterial fermentation may have on cider (both purposeful and accidental).
- Describe the cider making technique known as keeving and its impact on cider.
- Describe how ice cider is made; understand its history and different production methods used.
- Describe the impact yeast choice has on a cider.
- Understand what impact yeast health may have on a cider's characteristics.

V2.0

- Know why a cider maker would use different methods of maturation (storage post-fermentation).
- Be able to describe the process and impact of barrel aging.
- Explain what *sur lie* aging is, why a cider maker would select it, and potential pitfalls.
- Understand the potential impact of time and temperature choices on fermentation.
- Understand the impact of residual sugar in cider that has not stabilized.

Additional terms and concepts to know: Dosage, Lees, Pomace, Press, Kieving, Blending, Pectinase, Sweating, Maceration, Filtering, Pitching, Spontaneous Fermentation, *Sur Lie* Aging, Pasteurization, Turbidity, Malolactic Fermentation

Evaluation:

- Be able to evaluate and describe a cider, considering appearance, aroma, taste, mouthfeel, and finish
- Be able to identify and describe the 5 basic tastes
- Understand what flavor is and how we perceive it
- Understand the impact tannin and acid have on how dryness is perceived
- Understand the impact carbonation and serving temperature have on flavor
- Know the 5-step process to properly evaluate a cider
 - Aroma
 - Apple characteristics
 - Yeast
 - Other ingredients
 - Appearance
 - Color
 - Clarity
 - Carbonation
 - Taste
 - Sweet
 - Sour
 - Bitter
 - Salty
 - Umami
 - Mouthfeel
 - Body
 - Astringency
 - Carbonation
 - Finish
 - Any lingering characteristics
- Know the best practices for evaluating a cider
- Know the two types of olfaction:
 - Orthonasal
 - Retronasal

Be able to identify the following flaws when tasting a cider:

- Oxidation
- Hydrogen sulfide
- Cork taint
- Diacetyl
- Acetyl aldehyde
- Extreme Acetification
- Mousiness
- Burn Match
- Extreme Volatile Phenols

Additional terms and concepts to know (IMPORTANT):

- Astringency: Understand that astringency comes from tannin; know how astringency is different from dryness; be able to identify in a cider
- Tannin and acid: Be able to tell the difference between the two when evaluating a cider.
- Aromatics
- Know and be able to use common flavor descriptions to evaluate a cider (e.g. stone fruit, green pepper, baked apple, barnyard, etc.)

Flavor & Families

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- Families: Know the current American Cider Association Guidelines for cider families.
 - Styles: Know the character of traditional styles and production in the following cider making regions: France, Spain, Germany, and the United Kingdom.³ Be able to identify both French, Spanish and UK styles in a blind tasting.
 - Flavor: Understand the variations in acid, tannin and sugar possible within styles. Be able to distinguish ciders of varying levels of these characters.
 - Flavor: Understand the different flavor impacts of production choices
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Keeping and Serving: Have an understanding of

- The best practices for serving temperature of different styles of cider
 - The best practices for keeping draft cider
 - The best practices for pouring draft cider
 - Understand the differences in temporary draft systems (jockey box vs cold plates)
 - The components of proper draft installation and keg management
 - Proper cleaning and storage of glassware
 - The best practices for keeping packaged cider (bottles and cans)
 - The best practices for pouring packaged cider (bottles and cans)
 - How to help a customer select a cider that best fits their taste preference or meal
 - **Additional terms to know:** crown cap; cork and cage; American vs. European Sankey couplers, keg sizes, keg types and keg anatomy, FOBs (Foam on Beer Detectors)
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³ See USACM handout, World Cider Styles

Food & Cider:

Have an understanding of how to pair cider with food to benefit both the cider and the meal with the following pairing principles:

- Match intensity
- Terroir matching
- Complement
- Contrast
- Cut
- Complete

Pairings to investigate (we highly recommend trying them at home!) Memorize and understand:

- Cider and pork, generally
- Cider and cheese (Not all cider and cheese will pair well. Be specific.)
- Cider and seafood
- Cider and grilled meats or vegetables, generally
- Ice cider and blue cheese
- Dry, sparkling cider and roasted poultry
- Cider and spicy Asian food

Additional Terms & Concepts to Know:

- We recommend developing your own favorite pairing recommendation for different types of cider (dry/sweet, still/sparkling, low-tannin/high tannin, low-acid/high-acid, each of the families in the guidelines as well as including traditional world styles) and being able to describe why it works well using the aforementioned principles.
- Understand the history of cider cocktails as well as the principles to creating good cider cocktails.⁴
- Have some basic understanding of culinary terms

⁴ See American Cider Association handout: Cider Cocktail Principles