

#### How Much Space Do I Need to Run Pearson System of Courses?

Calculating space allocation on Pearson System of Courses

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#### Introduction

Each student or teacher who uses Chromebook has their own copy of the app installed on the device. This document explains how to measure and manage the space needed to install and use the Pearson System of Courses app and curriculum content on Chromebook, as well as iOS and Windows.





### **Available Platforms**

Pearson System of Courses is offered on the following platforms:

- Google Chromebook
- Apple iOS
- Microsoft Windows

While the application performs the same functions on each platform/operating system, there are differences. One of the major differences is how each platform protects user information. Unlike iOS and Windows, the method used by Chromebook to protect user information has a direct impact on the login process and the number of users who can share a device.

**Note:** The operating system of the mobile device that you use to first establish your account on Pearson System of Courses must be used for all subsequent logins. Using a device with an operating system (iOS, Windows, or Chrome) that differs from the initial account setup and use will cause significant issues. The ability to transition between devices with different operation systems is not supported at this time.

# The Chromebook Platform

## **Common Questions Around Space Usage**

#### Do I have enough space to use Pearson System of Courses on my Chromebook device?

Each curriculum course uses a different amount of space. See the <u>chart</u> below for the sizes.

#### Do I have enough space to add more grades and units to my Pearson System of Courses on Chromebook?

The chart below shows you how much space is needed to add a particular grade. Each curriculum unit needs additional space and those sizes are also in the chart.

#### How many students can share the same Chromebook?

Each student who logs in to the Chromebook has an individual copy of the app and curriculum content. The formula below will help you to calculate how much space is needed.

#### Can I free up more space by removing some of my units and grades?

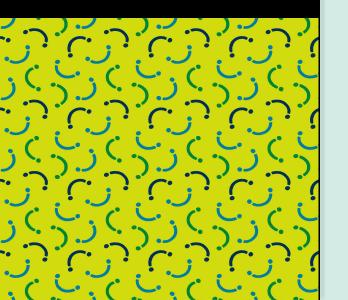
Pearson System of Courses on Chromebook allows you to remove individual units within a course. You can also remove an entire course as long it is not your default section (as determined by the Schoolnet profile). The chart below will show you how much space you can save by removing units and courses.

#### How do I know how much free space there is on my Chromebook device?

See How to See What's Taking Up Space on Your Chromebook.



## Chromebook is Secure



- Each Chromebook user must log in to the Chromebook with their own Google Account. The Google Account profile on the device keeps user data secure and safe from anyone else who uses the same device.
- Apps like the Pearson System of Courses are installed from the Chrome Web Store to the individual user profile and become part of the secure Chromebook environment.

# Pearson System of Courses on Chromebook

The same security feature that makes Chromebook user profiles invisible to other users also makes the apps they contain invisible to other users.

This means that each student who logs in to Chromebook has their own copy of the app downloaded and installed from the Chrome Web Store.



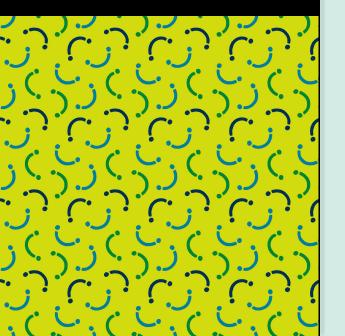


Pearson System of Courses Log in on Chromebook



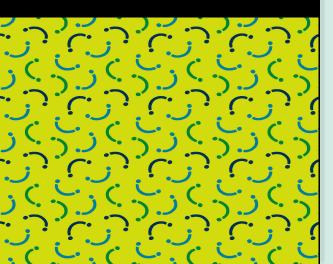
- A Google account must be used to log in to the Chromebook device and a separate, Pearson System of Courses username and password is used to log in to the Pearson System of Courses app.
- Once established, only a Pearson System of Courses username will be permitted to log in to the app.
- Another user must first log in to Pearson System of Courses on the Chromebook device using a unique Google account.

## Two Users: One Device, Two Apps



- Each Google user on the Chromebook device receives their own profile, downloads their own app and content, and logs in with their own Pearson System of Courses account.
- Once a Google account and Pearson System of Courses account are used to log in to Pearson System of Courses, the Pearson System of Courses app makes sure they are always used together on that device. (Deleting the app resets this enforced pairing.)
- Pearson System of Courses accounts cannot be shared on the same device. Each Google account requires a distinct Pearson System of Courses account.
- Each pair of Google+Pearson System of Courses users have their own copy of the app and content without access to any other content on the device.
- Sizing Chromebook for Pearson System of Courses is very important.

Sizing Chromebook for Pearson System of Courses



- Calculating Chromebook space allocation for use by Pearson System of Courses is dependent on several factors:
  - The number of users sharing the Chromebook device.
  - The amount of space available on the device.
  - The amount of curriculum content downloaded to the app by each user.
    - Students can download curriculum content for their rostered grade and subjects and have an option to download additional content from one grade above and below their current grade level.
    - Teachers can download content from any grade licensed by their district.
- The amount of user generated content created by each user as part of their coursework.

## **Chromebook for Pearson System of Courses**

a (# of students)	Size of device	b (available space)	Content size	c (content size + app + UGC/overhead)	Space usage formula: b - a(c+d)	Conclusion
1	16	7.2	G5 = 3.2	3.2+1.5 =4 .7	7.2 - 1(4.7) = 2.5	Enough space
2	16	7.2	G5 = 3.2	3.2+1.5 =4 .7	7.2 - 2(4.7) = -2.2	Not enough space
3	32	15.8	G5 = 3.2	3.2+1.5 =4 .7	16.8 - 3(4.7) = 2.7	Enough space
1	16	7.2	G5 = 3.2 G6 ELA = 1.6	3.2+1.6 + 1.5 =6 .3	7.2 - 1(6.3) = .9	Enough space

For example: If the complete Grade 5 ELA and Math course curriculum together take up 3.2 gigabytes of space along with 1.5 gigabytes for the Pearson System of Courses app and user generated content, the estimated disk space that is required on the device for each student is 4.7 gigabytes of available space.

If any additional curriculum content (grade above/grade below) is downloaded by students, then more space on the device will be consumed.

See <u>appendix</u> for grade by grade measurements.



## **The iOS Platform**

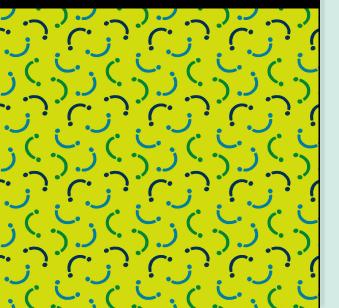
### Pearson System of Courses on iOS



- Unlike Chromebook devices, iPads allow multiple students to use the same device at different times with different Pearson System of Courses logins.
- The app and curriculum content is shared among all students.
- User generated content created by each student is kept secure and separate from all other users.

# The Windows Platform

Pearson System of Courses on Windows



- Like Chromebook devices, Windows devices allow multiple users to have accounts on a single device.
- Windows devices have the option to share the app and curriculum content across multiple users.
- Windows devices can also be set up to provide individual app and curriculum content per user like the Chromebook.
- Windows devices can allow more than one Pearson System of Courses login per Windows account login.



#### **Content Size Charts**

The following size charts can be used to calculate the amount of space taken up on the device when downloading content over the air (OTA). Sideloading content, which is available only on iOS and Windows, requires roughly double the amount of space on the device during the download of each content component. See iOS and Windows <u>technical</u> requirements documentation for sideload sizing by grades. All numbers are estimates because collection methods can vary depending on how grade content is downloaded.

The space taken up on the device metric is achieved by calculating the amount of storage taken up on the device as viewed by the chrome://quota-internals command on Chrome OS. The storage remaining on the device was measured before and after a download occurred. The delta was used to populate this column in the tabs. All sizes are approximate and are in megabytes.



#### **Summary of content downloads**

#### (Course and all units) in Megabytes.

Grade	ELA	Math	ELA + Math	Grade	ELA	Math	ELA + Math
К	5357	1357	6714	7	1324	1230	3283
1	5498	1494	6992	8	1052	2231	2760
2	3133	1419	4552	9	536	1410	1946
3	1450	110	2560	10	532	1609	2141
4	1393	1612	3005	11	453	1684	2137
5	1293	1150	2614	12	449	N/A	449
6	1067	1910	2977				
Totals							42130



### Grade K

ELA	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	120
ELA - all units	5237
Unit 1	520
Unit G-N	260
Unit 2	433
Unit G-I	230
Unit 3	390
Unit G-O	210
Unit 4	440
Unit 5	330
Unit 6	680
Unit 7	500
Unit 8	390
Unit 9	510
Unit 10	48
Unit 11	193
Unit 12	103
Total course and units	5357

Math	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	97
Math - all units	1260
Unit 0	
Unit 1	50
Unit 2	110
Unit 3	250
Unit 4	30
Unit 5	150
Unit 6	160
Unit 7	50
Unit 8	130
Unit 9	40
Unit 10	40
Unit 11	130
Unit 12	120
Total course and units	1357



ELA	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	305
ELA - all units	5498
Unit 1	490
Unit G-N	239
Unit 2	591
Unit G-I	238
Unit 3	488
Unit 4	595
Unit G-O	246
Unit 5	463
Unit 6	329
Unit 7	471
Unit 8	431
Unit 9	612
Total course and units	5803

Math	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	174
Math - all units	1494
Unit 0	180
Unit 1	70
Unit 2	80
Unit 3	120
Unit 4	80
Unit 5	70
Unit 6	180
Unit 7	60
Unit 8	220
Unit 9	0
Unit 10	60
Unit 11	200
Total course and units	1668



ELA	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	410
ELA - all units	3133
Unit 1	195
Unit G-N	62
Unit 2	271
Unit G-I	24
Unit 3	326
Unit 4	247
Unit 5	351
Unit G-O	84
Unit 6	772
Unit 7	194
Unit 8	197
Total course and units	3543

Math	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	480
Math - all units	939
Unit 0	63
Unit 1	65
Unit 2	111
Unit 3	59
Unit 4	94
Unit 5	85
Unit 6	68
Unit 7	51
Unit 8	60
Unit 9	80
Unit 10	34
Unit 11	139
Unit 12	30
Total course and units	1419





ELA	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	580
ELA - all units	870
Unit 1	188
Unit 2	200
Unit A	40
Unit G-N	53
Unit 3	11
Unit G-I	73
Unit 4	131
Unit B	13
Unit G-O	10
Unit 5	135
Unit 6	16
Total course and units	1450

Math	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	740
Math - all units	1684
Unit 0	32
Unit 1	185
Unit Test A	72
Unit 2	171
Unit 3	236
Unit 4	166
Unit 5	226
Unit 6	97
Unit 7	260
Unit 8	68
Unit 9	54
Unit 10	56
Unit 11	14
Unit 12	47
Unit Test B	0
Total course and units	2424





ELA	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	550
ELA - all units	843
Unit 1	254
Unit 2	59
Unit A	4
Unit G-N	7
Unit 3	110
Unit G-I	18
Unit 4	150
Unit B	43
Unit G-O	24
Unit 5	94
Unit 6	80
Total course and units	1393

Math	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	625
Math - all units	987
Unit 0	34
Unit 1	75
Unit Test A	24
Unit 2	101
Unit 3	190
Unit 4	133
Unit 5	19
Unit 6	117
Unit 7	176
Unit 8	62
Unit 9	56
Unit Test B	0
Total course and units	1612





ELA	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	660
ELA - all units	633
Unit 1	74
Unit G-I	11
Unit 2	97
Unit A	6
Unit G-N	5
Unit 3	85
Unit G-O	1
Unit 4	87
Unit B	8
Unit 5	29
Unit 6	230
Total course and units	1293

Math	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	675
Math - all units	1121
Unit 0	23
Unit 1	223
Unit Test A	35
Unit 2	128
Unit 3	144
Unit 4	42
Unit 5	113
Unit 6	45
Unit 7	167
Unit 8	50
Unit 9	76
Unit 10	75
Unit Test B	0
Total course and units	1796

ELA	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	620
ELA - all units	447
Unit 1	39
Unit G-A	6
Unit 2	150
Unit A	33
Unit G-N	3
Unit 3	128
Unit G-I	22
Unit 4	12
Unit B	17
Unit 5	37
Total course and units	1067

Math	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	680
Math - all units	1230
Unit 0	31
Unit 1	158
Unit Test A	1
Unit 2	115
Unit 3	149
Unit 4	139
Unit 5	132
Unit 6	188
Unit 7	103
Unit 8	85
Unit 9	129
Unit Test B	0
Total course and units	1910



ELA	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	570
ELA - all units	754
Unit 1	48
Unit 2	3
	20
Unit A	52
Unit G-A	8
Unit RMU	18
Unit 3	75
Unit G-I	8
Unit 4	346
Unit B	6
Unit 5	170
Total course and units	1324

Math	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	640
Math - all units	1230
Unit 0	16
Unit 1	147
Unit Test A	21
Unit 2	209
Unit 3	168
Unit 4	208
Unit 5	140
Unit 6	114
Unit 7	207
Unit Test B	0
Total course and units	1870



ELA	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	680
ELA - all units	372
Unit 1	45
Unit G-N	9
Unit 2	47
Unit A	12
Unit G-A	7
Unit 3	26
Unit G-I	4
Unit 4	213
Unit B	9
Unit 5	0
Total course and units	1052

Math	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	817
Math - all units	1415
Unit 0	145
Unit 1	86
Unit Test A	33
Unit 2	163
Unit 3	227
Unit 4	176
Unit 5	153
Unit 6	82
Unit 7	148
Unit 8	56
Unit 9	146
Unit B	0
Total course and units	2232



ELA	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	200
ELA - all units	336
Unit 1	23
Unit 2	68
Unit A	35
Unit 3	65
Unit 4	28
Unit B	12
Unit 5	105
Total course and units	536

Math	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	490
Math - all units	920
Unit 0	5
Unit 1	152
Unit Test A	9
Unit 2	38
Unit 3	87
Unit 4	33
Unit 5	89
Unit Project A	11
Unit 6	109
Unit 7	112
Unit 8	33
Unit 9	232
Unit Project B	10
Unit Test B	0
Total course and units	1410



ELA	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	190
ELA - all units	342
Unit 1	20
Unit 2	108
Unit A	76
Unit 3	28
Unit 4	23
Unit B	2
Unit 5	85
Total course and units	532

Math	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	474
Math - all units	1135
Unit 0	26
Unit 1	115
Unit Test A	0
Unit 2	200
Unit 3	126
Unit 4	91
Unit 5	12
Unit Project A	4
Unit 6	67
Unit 7	120
Unit 8	146
Unit 9	165
Unit 10	49
Unit Project B	14
Total course and units	1609

ELA	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	260
ELA - all units	193
Unit 1	53
Unit 2	19
Unit A	4
Unit 3	35
Unit 4	27
Unit B	8
Unit 5	47
Total course and units	453

Math	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	430
Math - all units	1254
Unit 0	15
Unit 1	189
Unit Test A	0
Unit 2	98
Unit 3	96
Unit 4	40
Unit Project A	16
Unit 5	545
Unit 6	171
Unit 7	52
Unit 8	19
Unit Project B	13
Unit Test B	0
Total course and units	1684





ELA	Space taken up on the device (MB)
Initial Course Download, Resource Library & Assets, Assessments	240
ELA - all units	209
Unit 1	37
Unit 2	20
Unit A	6
Unit 3	73
Unit 4	39
Unit B	8
Unit 5	26
Total course and units	449

#### See Grades K-11 for Pearson System of Courses Math.



#### ALWAYS LEARNING