

# Instructional Materials Technology Information

**Title:** Match Fishtank Mathematics

**Content Area:** Math

**Publisher:** Match Education

**Grades:** 3-5

**Copyright:** 2019

# Instructional Materials Technology Information

Since EdReports released its first reviews five years ago, the materials landscape has changed dramatically, especially in the area of technology. District questions have evolved from ensuring materials could be accessed on older browsers and versions of operating systems to detailed questions about interoperability, compatibility, security, support, and digital design. These questions have become even more important during the pandemic as districts assess what instructional materials may work best in their communities not just in-person, but also remotely and in hybrid settings. Access to high quality instructional materials by all students is more important than ever, and technology plays an essential role in that access. To help provide technology information for materials that meet alignment criteria in Gateways 1 and 2, EdReports has requested publishers answer the following questions to help consumers better understand the digital design and capabilities of their instructional materials.

- Section 1 provides broader questions most frequently asked of EdReports about the design of materials. These questions are meant to provide higher level, summary information.
- Section 2 provides more fine-grained details on aspects of design and functionality.

## Considerations When Reading This Document

- EdReports is seeking the most accurate, descriptive information about curricular products. We are not evaluating quality or desirability, but documenting features in materials to empower local schools and districts with information to select materials that will work best for them given their technological capabilities and instructional vision.
- The information in this document comes directly from publishers. EdReports reviewed the information for clarity and consistency, but did not verify its accuracy. Questions you have regarding any of the reported information should be directed to the publisher of the product.
- Look at the information in the “Details” column carefully. Functionality and digital design can vary greatly depending on how a publisher responded. Most publishers provide granular information for each question to illuminate their responses.
- This document is most effective when paired with questions that relate to your local context and reviewed with both content and IT staff. Consider your district’s technological access and capacity amongst students, teachers, and schools.

# Table of Contents

[Section 1: Usability Snapshot](#)

[Section 2: Technology Details](#)

- [Design](#)
- [System Access](#)
- [Technical Support](#)
- [Compatibility](#)
- [Accessibility](#)
- [Additional Technology Specifications](#)

## Section 1: Usability Snapshot

This section includes questions on digital design and support that allows users quick access to essential information.

**\* Note:**

**“Yes with core product”** below should be used to indicate functionality in the core materials as reviewed by EdReports that are available without LMS integration.

**“Yes with dependencies”** below refers to functionality in the materials reviewed by EdReports that are present or accessible only through working in a separate LMS, by utilizing other software as a plug-in, linking externally to sites outside the materials, or if functionality is dependent on a supplemental purchase.

Questions	Check Only One				Details
	Yes with core product	Yes with dependencies	No	Under Development	
Are the materials designed so that students are able to access and complete work online?			X		.
Do the materials support learning in hybrid settings (both in-person and remote learning) concurrently?	X				<ul style="list-style-type: none"> <li>The curriculum was initially designed to be used in classrooms. Teachers have experienced success also using the materials for remote learning. Some schools have printed packets for their students and some have posted lesson content online via other platforms. Guidance is also provided on suggested videos to use to support student learning at home and how to adjust pacing when needed.</li> </ul>
Are tasks, activities, and lessons able to be printed either for in-class use or for use in at-home learning?	X				

Is there instruction so students can work independently (or with an adult at home)?		X			<ul style="list-style-type: none"> <li>Teachers can use the guidance in the lesson plan to record videos of themselves working through examples and teaching concepts. These videos can be shared with students via any LMS.</li> </ul>
Does the technology facilitate a teacher's ability to differentiate lessons, tasks, or other content for students?			X		<ul style="list-style-type: none"> <li>Fishtank materials are highly customizable. Teachers can adjust lesson pacing and unit placement as needed.</li> <li>There is no technology to differentiate automatically based on student responses.</li> <li>The technology does not provide any recommendations to the teacher regarding how to differentiate the content.</li> </ul>
Are there tutorials, videos, or other integrated supports in the materials to help educators to understand and/or utilize the materials?	X				Teachers have access to our Teacher Tools which provide guidance on how to use the curriculum resources. There are also notes and guiding questions within the lessons.
Are there tutorials, videos, or other integrated supports in the materials to help parents/guardians to understand and/or utilize the materials?	X				<ul style="list-style-type: none"> <li>Parents/ guardians have access to our Teacher Tools which provide guidance on how to use the curriculum resources as well as notes and guiding questions in the lessons.</li> </ul>
Are all of the following audiences provided access to the product as part of the core purchase? <ul style="list-style-type: none"> <li>parents/guardians</li> <li>Educators (Teachers, Administrators, etc.)</li> <li>Students</li> </ul>	X				<ul style="list-style-type: none"> <li>Teachers, parents and students have access to the free curriculum resources on our website.</li> </ul>
Are the materials designed to integrate with a Learning Management System (LMS)?			X		

Does all content conform to the <a href="#">National Instructional Materials Accessibility Standard</a> ?			X		
Is there technical support during day-to-day use?	X				<p>Is it primarily the responsibility of the client or the publisher?</p> <ul style="list-style-type: none"> <li>Match Fishtank responds to technical issues raised by teachers in day-to-day use within 48 hours.</li> </ul>

## Section 2: Technology Checklist

The following checklists are designed to give more detailed information about digital design and technical capabilities in key areas of instructional materials to support state and local decision making. This list reflects details commonly requested by those making purchasing decisions at the state or local level.

### Design

Design questions address whether the materials are designed to be used digitally in an in-person environment, remote learning environment, or both. Digital design can vary, often ranging from the ability to access files that are identical to print materials online to doing tasks and assessments as part of the program. The ability to take advantage of design functionality may depend on answers to questions in other sections of the checklist such as internet capabilities, number and type of devices, etc.

**\* Note:**

**“Yes with core product”** below should be used to indicate functionality in the core materials as reviewed by EdReports that are available without LMS integration.

**“Yes with dependencies”** below refers to functionality in the materials reviewed by EdReports that are present or accessible only through working in a separate LMS, by utilizing other software as a plug-in, linking externally to sites outside the materials, or if functionality is dependent on a supplemental purchase.

Questions	Check Only One				Details
	Yes with core product	Yes with dependencies	No	Under Development	
Are the materials designed to be used with both digital and print components?					
Are there print options available for student-facing materials that could be utilized in a blended digital approach?					
Is the print content identical, similar, or comparable to the digital?			X		

Is the digital design of the materials intended to replicate a textbook experience?			X		<ul style="list-style-type: none"> <li></li> </ul>
Are digital teacher guides available for the materials?	X				<ul style="list-style-type: none"> <li>All of Fishtank is a digital teacher guide - it is a teacher facing product.</li> <li>Parents and guardians can look at Match Fishtank content at home on the website.</li> <li>There is no student facing website at this time.</li> </ul>
Do the materials contain videos/animations/simulations for student learning?	X				<ul style="list-style-type: none"> <li>Some lessons provide links to videos and simulations that can be accessed on other websites by students. These are not resources maintained by Match Fishtank. Teachers can assign the videos and simulations to students as needed.</li> </ul>
Is any or all online content dependent on links that are not maintained by the publisher?			X		
Do the materials include opportunities for online collaboration among students?			X		<ul style="list-style-type: none"> <li></li> </ul>
Do the materials include built in features for student-to-teacher interaction?			X		<ul style="list-style-type: none"> <li></li> </ul>
Is a 1:1 device ratio required?			X		<ul style="list-style-type: none"> <li></li> </ul>
Are the assessments contained within the materials able to be securely completed by students online?			X		<ul style="list-style-type: none"> <li></li> </ul>
Is data available about user sessions (e.g., timestamps, content being viewed, callbacks fired, etc...)?			X		<ul style="list-style-type: none"> <li></li> </ul>

Are there online professional learning supports to help teachers utilize the materials?	X				<ul style="list-style-type: none"> <li>There are "Tips for Teachers" in every lesson. Including guidance on adapting for remote learning.</li> </ul>
Are there parent/guardian resources available for school systems to utilize: <ul style="list-style-type: none"> <li>For when there is in-person instruction?</li> <li>For when there is hybrid instruction?</li> <li>For creating continued learning plans for distance learning schedules?</li> </ul>	X				Parents have full access to Match Fishtank curriculum on our website. It is easy for parents to navigate to see the learning objectives of each lesson and notes and examples from the lessons that would be helpful when parents need to assist with problem sets.

<b>Learning Management Systems</b>	<b>Blackboard</b>	<b>Canvas</b>	<b>Eduphoria</b>	<b>Google Classroom</b>	<b>ItsLearning</b>	<b>Moodle</b>	<b>Schoology</b>	<b>Other: Please list below</b>
Are the materials configured to work with one or more learning management systems? Check all that apply.								
If the materials integrate with any of the LMS above, include information here about any additional costs and which version of your materials and the LMS was tested.								

# System Access

System access questions address how users access the digital materials and what kind of logins/passwords are accepted/supported/required.

**\* Note:**

**“Yes with core product”** below should be used to indicate functionality in the core materials as reviewed by EdReports that are available without LMS integration.

**“Yes with dependencies”** below refers to functionality in the materials reviewed by EdReports that are present or accessible only through working in a separate LMS, by utilizing other software as a plug-in, linking externally to sites outside the materials, or if functionality is dependent on a supplemental purchase.

Questions	Check Only One				Details
	Yes with core product	Yes with dependencies	No	Under Development	
Is single sign-on supported?	X				Sign in with Google is available
Can the platform manage staff assigned to multiple schools with a single sign-on?			X		Each teacher has their own account to sign in.
Can co-teachers be assigned to multiple classes?			X		This feature is not applicable. There are no classrooms on Match Fishtank.
Can students who move between teachers or schools using the same materials be re-assigned without losing their work/progress?			X		No student progress is saved on our platform.
Can the platform provide user accounts for staff members (principals and other admin) who are not assigned students?	X				<ul style="list-style-type: none"> <li>Teachers and Administrators each can have their own account.</li> </ul>

Can passwords be reset without assistance from trained IT staff?	X				<ul style="list-style-type: none"> <li>Only teachers/ administrators have Match Fishtank accounts and teachers can reset their password anytime.</li> </ul>
When working offline, does the product automatically sync when a connection is re-established?					NA

## Technical Support

Technical Support questions are designed to help users understand what assistance to expect. These details are important to consider alongside local capacity for devices, networks, and use. Considering what level of independence users will have alongside these criteria can help schools and districts reflect on their needs for support.

**\* Note:**

**“Yes with core product”** below should be used to indicate functionality in the core materials as reviewed by EdReports that are available without LMS integration.

**“Yes with dependencies”** below refers to functionality in the materials reviewed by EdReports that are present or accessible only through working in a separate LMS, by utilizing other software as a plug-in, linking externally to sites outside the materials, or if functionality is dependent on a supplemental purchase.

Technical Support	Check Only One				Details
	Yes with core product	Yes with dependencies	No	Under Development	
Is technical support provided to districts during initial set-up and deployment?			X		<ul style="list-style-type: none"> <li>Very little technical support is needed for initial set-up. Teachers create their own accounts. If they have trouble they can submit an issue on our website through the Contact Us feature or by sending an email to <a href="mailto:info@matchfishtank.org">info@matchfishtank.org</a> We respond to all issues within 24 hours Monday through Friday</li> </ul>

Is technical support provided during the duration of the contract?	X				<ul style="list-style-type: none"> <li>Anyone experiencing difficulty can submit an issue on our website through the Contact Us feature or by sending an email to <a href="mailto:info@matchfishtank.org">info@matchfishtank.org</a></li> <li>We respond to all issues within 24 hours Monday through Friday.</li> </ul>
If utilizing a free or trial version, is technical support provided?	X				See above
Are there self-service supports for troubleshooting?			X		
Does technical support include planning for emergency access and district support?			X		

## Compatibility

Compatibility questions address technical compatibility specifications. It is designed to help users understand how the materials will look and operate on various devices. These details are important to consider alongside local capacity for devices, networks, and use. Understanding what devices function best can help determine users' needs for district device or technical support.

**\* Note:**

**“Yes with core product”** below should be used to indicate functionality in the core materials as reviewed by EdReports that are available without LMS integration.

**“Yes with dependencies”** below refers to functionality in the materials reviewed by EdReports that are present or accessible only through working in a separate LMS, by utilizing other software as a plug-in, linking externally to sites outside the materials, or if functionality is dependent on a supplemental purchase.

Questions	Check Only One				Details
	Yes with core product	Yes with dependencies	No	Under Development	
Does the product have a native mobile application?			X		
Is the product browser-based?	X				
Does the product use responsive design for rendering on smartphones?	X				
Does the product use responsive design for rendering on tablet devices?	X				
Does the product use responsive design for rendering on laptop devices?	X				
Does the product use responsive design for rendering on desktop devices?	X				

Are all users (students/teachers/staff/admin/parents) permitted to use the product on more than one device (e.g. computer at school and a laptop at home or a smartphone and a laptop)?	X				No additional software downloads are necessary
---	---	--	--	--	--

Device Type	Mark box if device is compatible	Oldest operating system/version supported	Newest operating system/version supported	Details
				Indicate if the materials are designed for a specific device type or if they are generally compatible.
Windows	✓			Our content is browser based, so dependent upon the browser version and not the OS version.
Linux	✓			“
Windows Tablet	✓			“
Apple Laptop/Desktop	✓			“
iPhone	✓			“
iPad	✓			“
Android Phone	✓			“
Android Tablet	✓			“
Chromebook/Chrome OS	✓			“
Amazon Fire OS	✓			“
Other E-Reader				
Interactive Whiteboard				

Browser		Operating System						
		Apple		Windows		Linux	Chrome OS	N/A
	Check if browser is compatible	Oldest version supported	Newest version supported	Oldest version supported	Newest version supported			
Chrome	✓	21	83	21	83	83	83	
Firefox	✓	28	77	28	77	77	77	
Safari	✓	6.1	13					
Edge (formerly Internet Explorer)	✓	12	83	12	83	83	83	
Internet Explorer	✓	8	11	8	11	11	11	
Other:_____	✓		1		1	1	1	

Additional Notes: We use a variety of build systems to make sure that our CSS and JS polyfills for all browser types

## Accessibility

Curricula with digital capabilities integrate accessible supports in a variety of ways. Accessibility questions pertain specifically to diverse learners who may need specific supports to be able to successfully interact with materials.

Questions	Check Only One				Details
	Yes with core product	Yes with dependencies	No	Under Development	
Screen Readers				X	
Screen Magnification Software				X	
Text Readers				X	
Adjustable Print Size				X	
Speech Input Software			X		
Header Point Devices			X		
Motion/Eye Tracking Devices			X		
Single Switch Entry Devices			X		
Braille Readers/ Display Devices				X	
Closed Captioning	X				
Alternative Input Devices			X		
High Color Contrast Display Options				X	
Translation of Text to Other Languages			X		
Bilingual Dictionaries available for students			X		
Are there required accessories (headsets, speakers)?			X		•

Multiple Playback of audio/video	X				
Can students adjust the speed of audio/video playback?			X		
Are these accessibility supports able to be turned on/off?				X	•
Does all browser-based technology satisfy the Web Content Accessibility Guidelines or <a href="#">VPAT</a> ?				X	

# Additional Technology Specifications

## Data Security and Privacy

Data Security and Privacy questions address how student data storage, disposal, and adherence to privacy laws are addressed. If applicable, privacy reports and/or certificates can be found next to the respective indicator.

Questions	Check Only One			Details
	Yes	No	Under Development	
<b>Data Security:</b> Are data elements encrypted at rest, i.e. in a database or file system?	X			<ul style="list-style-type: none"> <li>We encrypt all user passwords. We use a PBKDF2 algorithm with a SHA256 hash</li> </ul>
<b>Data Security:</b> Do the materials refer students to video, content, and other online sources that are not native to the materials?		X		<ul style="list-style-type: none"> <li>We use hyperlinks to a variety of other resources for the teachers to use</li> </ul>
<b>Data Security:</b> Does the end-user licensing agreement allow customers to scrape data from the product?		X		
<b>Privacy:</b> Is personally-identifying student data provided to, generated by, or stored in any systems used by the product?		X		<ul style="list-style-type: none"> <li></li> </ul>
<b>Privacy:</b> Does the product/vendor make their student privacy policy publicly available?		X		<ul style="list-style-type: none"> <li>Because no student data is retained</li> </ul>
<b>Privacy:</b> Does the product conform with FERPA regulations (e.g., allows districts to maintain direct control of the student record, implements permissions to prevent unnecessary disclosures, etc.)?		X		<ul style="list-style-type: none"> <li>Because no student data is retained</li> </ul>
<b>Privacy:</b> Has a third-party evaluated the product for FERPA compliance?		X		<ul style="list-style-type: none"> <li></li> </ul>
<b>Privacy:</b> Does the product allow registration or data collection from children under the age of 13?		X		<ul style="list-style-type: none"> <li></li> </ul>

# Installation

Feature/Requirement/Specification	Check Only One			Details
	Yes	No	Under Development	
Is the product downloaded to individual devices: one-time internet connection required?		X		<p>It is a browser based product that doesn't require download.</p> <p>We are looking to develop a service worker so that the content can be referenced without an internet connection.</p> <p>Also, you can download the PDF of the content as a one time effort.</p>
Is the product installed on individual computers (from CD-ROM/DVD, flash drive, etc.): no internet connection required?		X		<p>If yes,</p> <ul style="list-style-type: none"> <li>Estimate time per device required for setup, indicate if support is provided, and if local IT staff is needed.</li> </ul>
Is the product installed on LAN/WAN (school or district server): no internet connection required for teachers/students after installation?		X		
Required server configuration. Do network admins need to ensure a specific set of domains are white listed to allow the internet traffic to those endpoints?	X			If the network admins need to approve a domain, then yes.
Does the product support deployment through Mobile Device Management (MDM) systems?		X		
Does the product provide a detailed schedule of updates that minimizes access interruption?		X		
Does the login authentication use district protocols to establish unique and memorable usernames and passwords?		X		We use emails as our usernames and passwords are self-selected by the user.
Is there an option for concurrent user licensing?	X			Multiple licenses can be purchased by a school.

Standards Compliance/Certification	Check all that apply	Details
SIF		If checked, include where customers can verify this information.
CEDS		If checked, include where customers can verify this information.
EDUPUB		If checked, include where customers can verify this information.
Ed-Fi (SIS/ODS)		If checked, include where customers can verify this information.
Ed-Fi (Assessments)		If checked, include where customers can verify this information.
MS Global (Competencies and Academic Standards Exchange)		If checked, include where customers can verify this information.
IMS Global (Comprehensive Learner Record)		If checked, include where customers can verify this information.
IMS Global (Open Badges)		If checked, include where customers can verify this information.
IMS Global (One Roster)		If checked, include where customers can verify this information.
IMS Global (Caliper Analytics)		If checked, include where customers can verify this information.
IMS Global (Question and Test Interoperability (QTI))		If checked, include where customers can verify this information.
IMS Global (Learning Tools Interoperability (LTI))		If checked, include where customers can verify this information.
IMS Global (LTI Advantage)		If checked, include where customers can verify this information.
IMS Global (Common Cartridge)		If checked, include where customers can verify this information.
IMS Global (Lite Common Cartridge)		If checked, include where customers can verify this information.
IMS Global (Open Video)		If checked, include where customers can verify this information.
Other:		If checked, list and include where customers can verify this information.

Implementation and Scalability	Yes/No or Value
What is the average page load time?	900ms
What is the required bandwidth per user?	Each page is around 2mb, so it would be dependent upon the amount of pages they visit and if they decide to download the materials as a PDF/Zip. Unit level zips are around 15mb and lesson level zips are around 1mb each.
Are results of stress tests provided to customers?	No
Is a disaster recovery plan for data provided to customers?	No - although we keep daily backups of our databases
Are customers provided with a standardized implementation plan to ensure a successful rollout?	No
Does the service level agreement include uptime guarantees of at least 95% excluding planned maintenance/down-times?	N/A
Does the product require a VPN for off site access?	No