

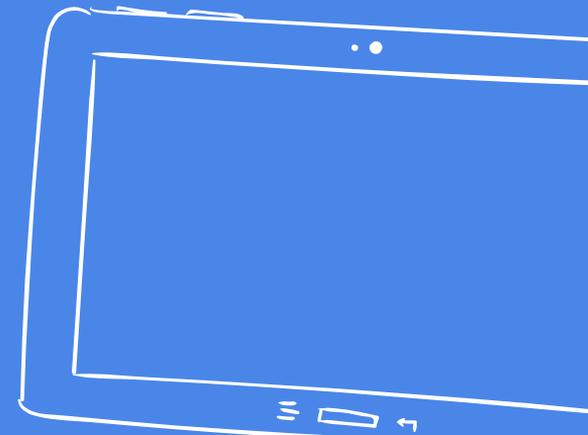
STEM AND DIGITAL

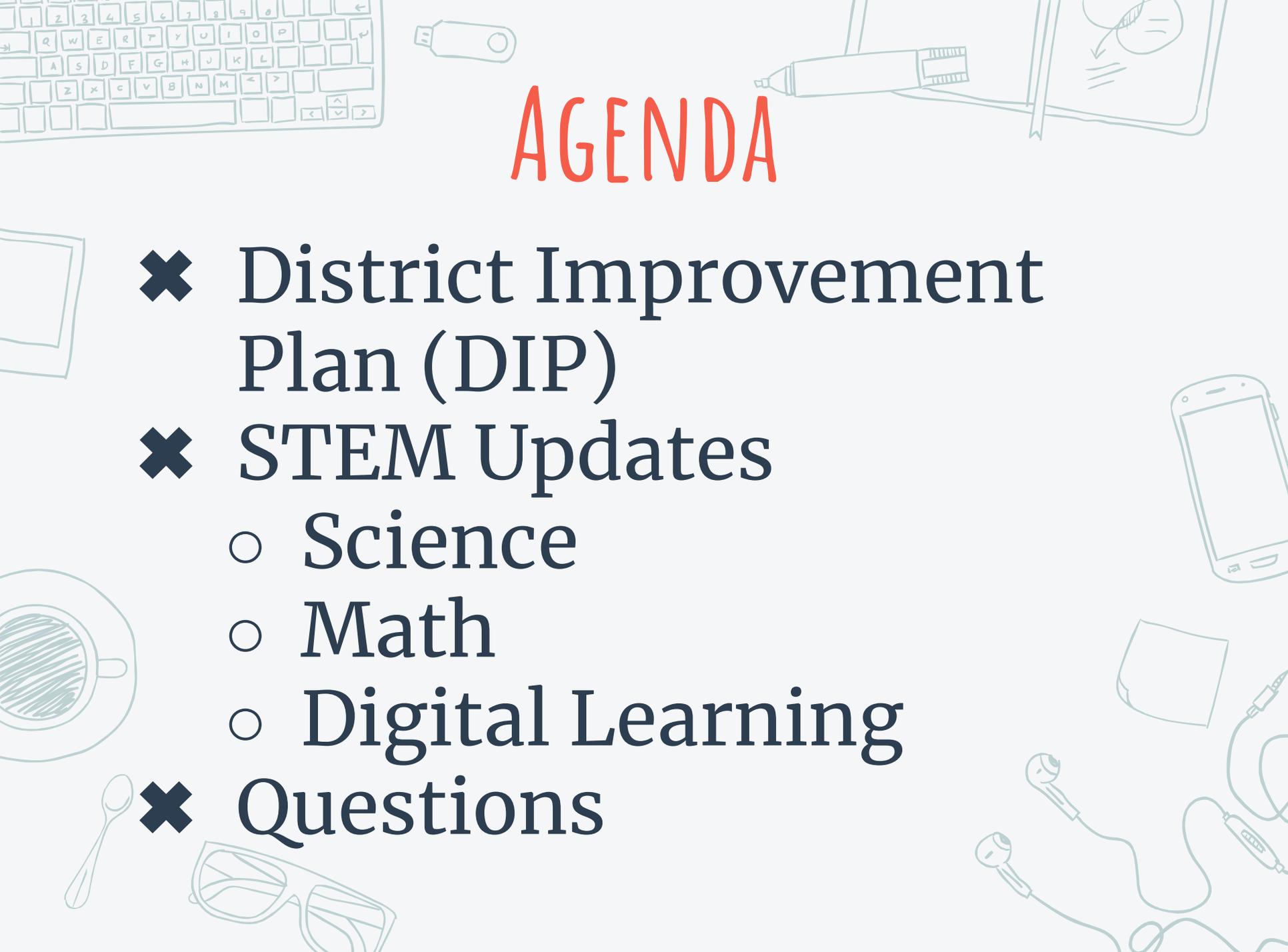
LEARNING UPDATE

FRANKLIN PUBLIC SCHOOLS

DR. JOYCE EDWARDS

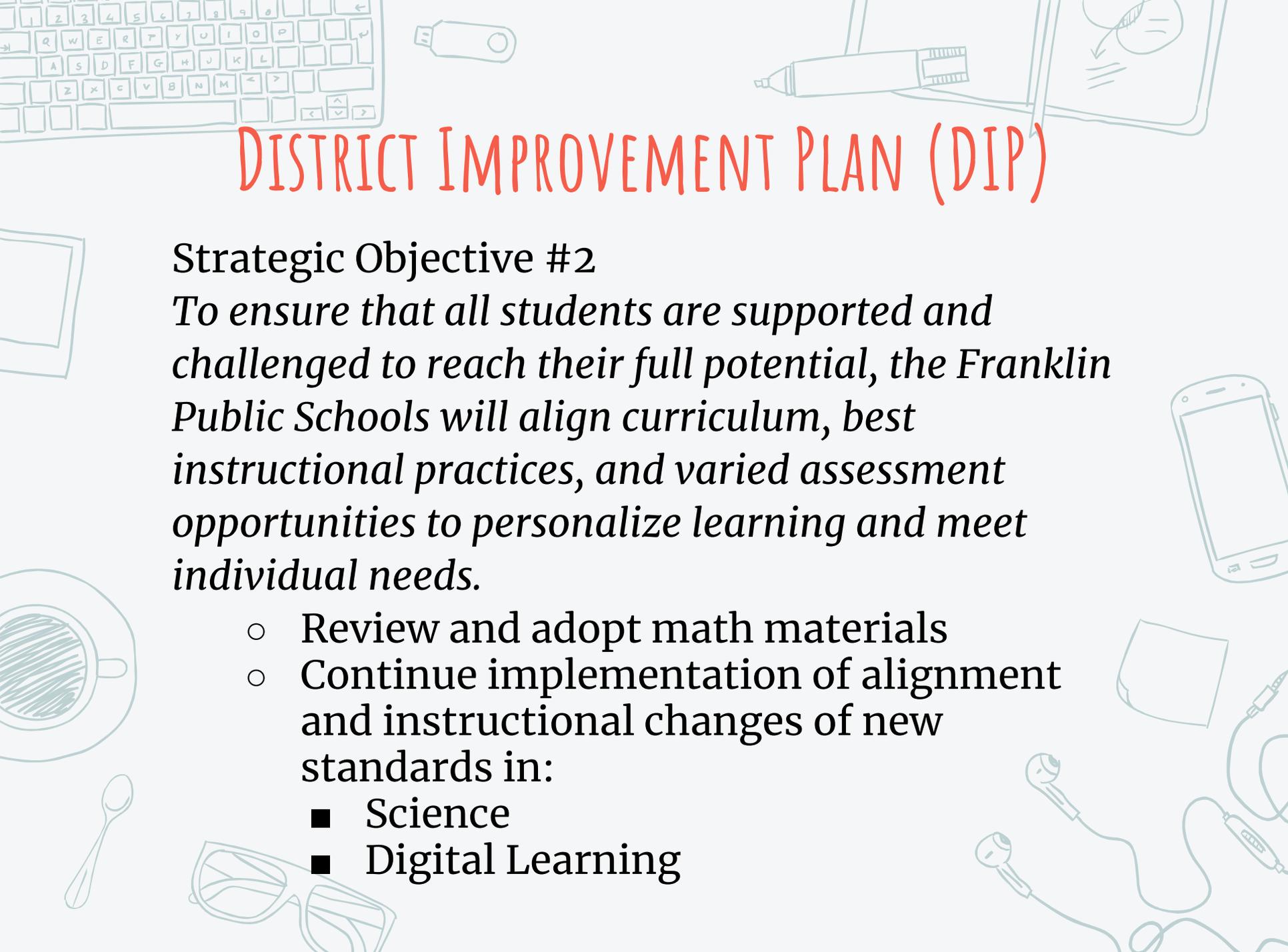
APRIL 10, 2018





# AGENDA

- ✘ District Improvement Plan (DIP)
- ✘ STEM Updates
  - Science
  - Math
  - Digital Learning
- ✘ Questions



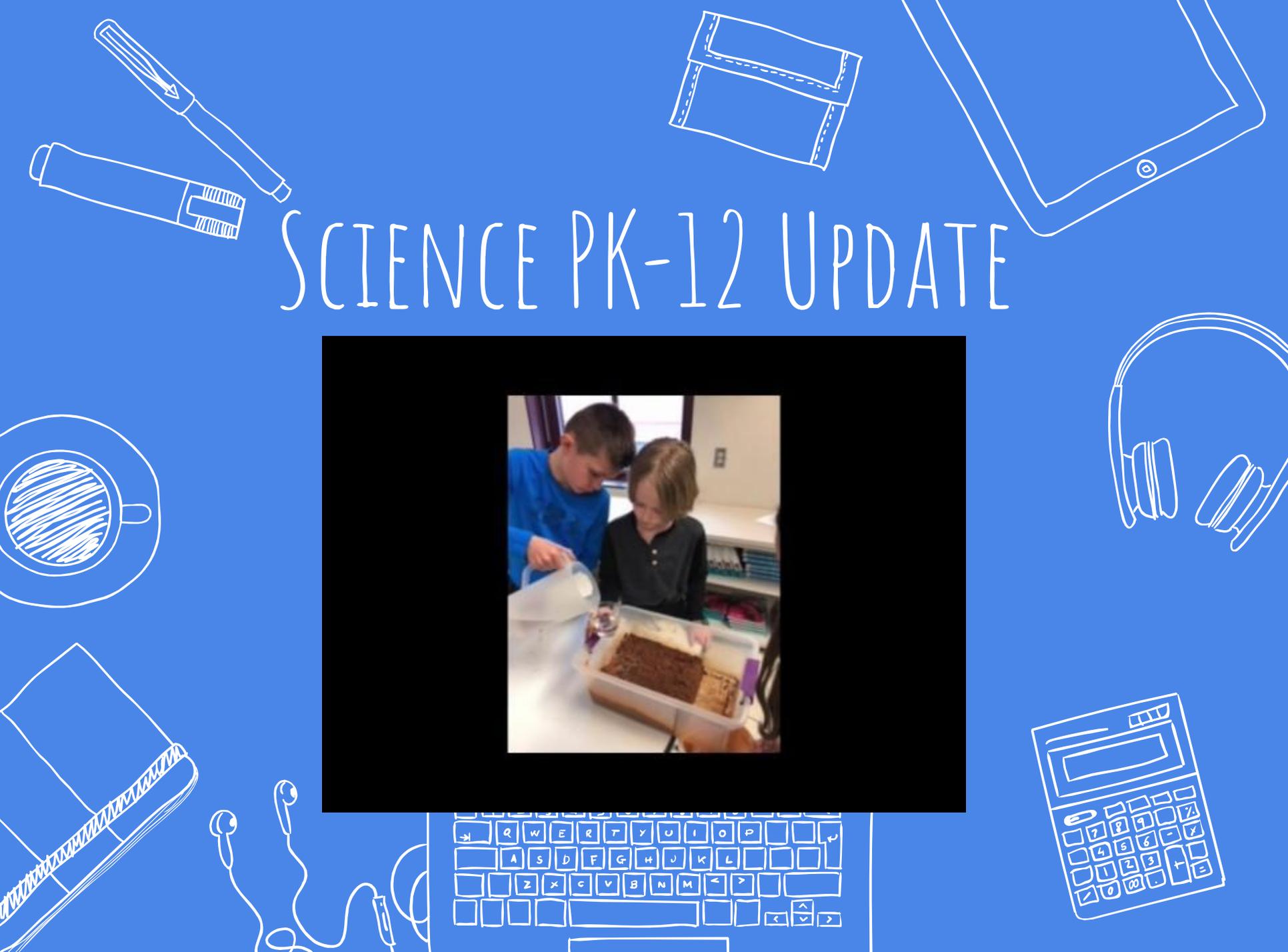
# DISTRICT IMPROVEMENT PLAN (DIP)

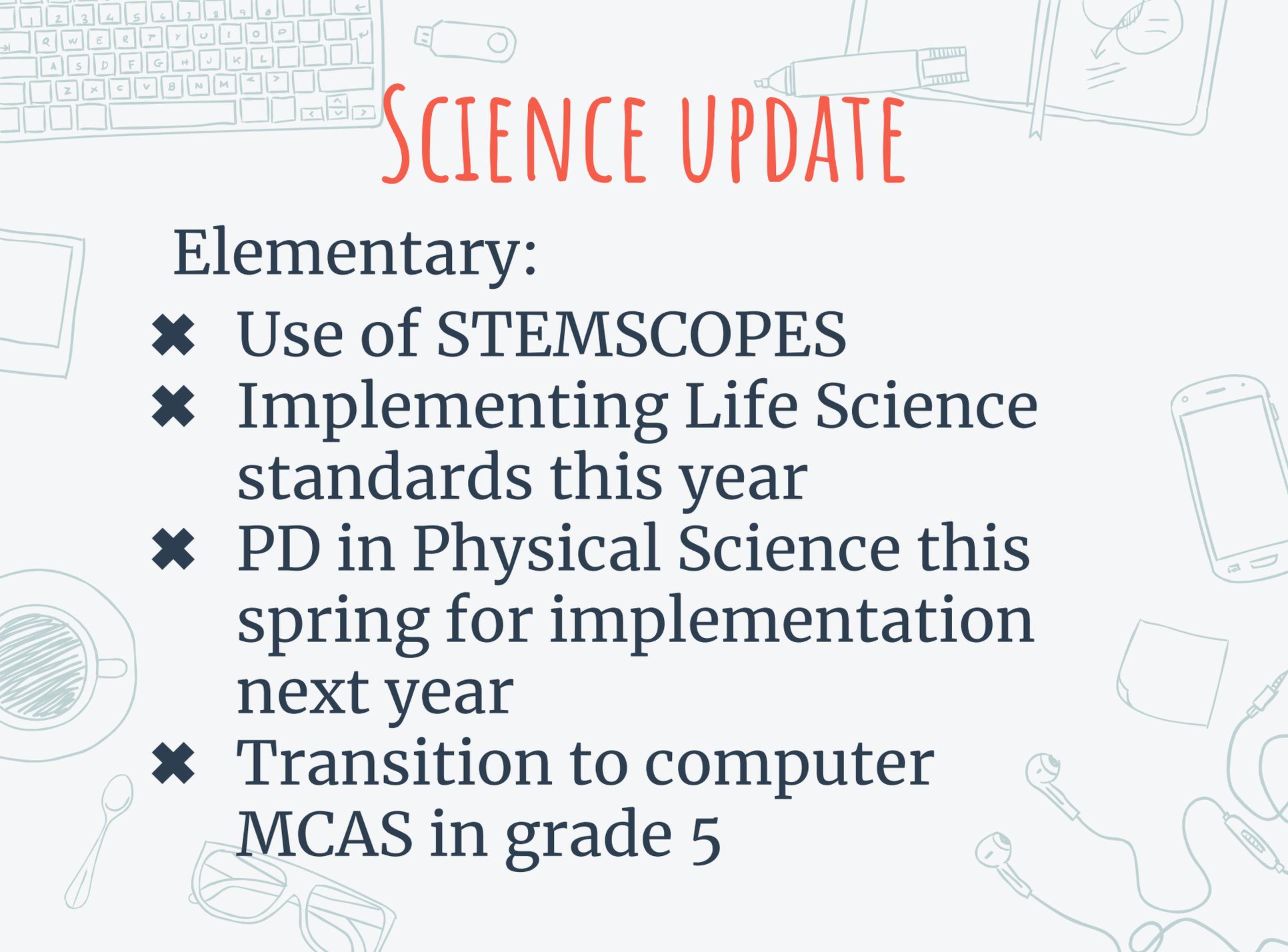
## Strategic Objective #2

*To ensure that all students are supported and challenged to reach their full potential, the Franklin Public Schools will align curriculum, best instructional practices, and varied assessment opportunities to personalize learning and meet individual needs.*

- Review and adopt math materials
- Continue implementation of alignment and instructional changes of new standards in:
  - Science
  - Digital Learning

# SCIENCE PK-12 UPDATE

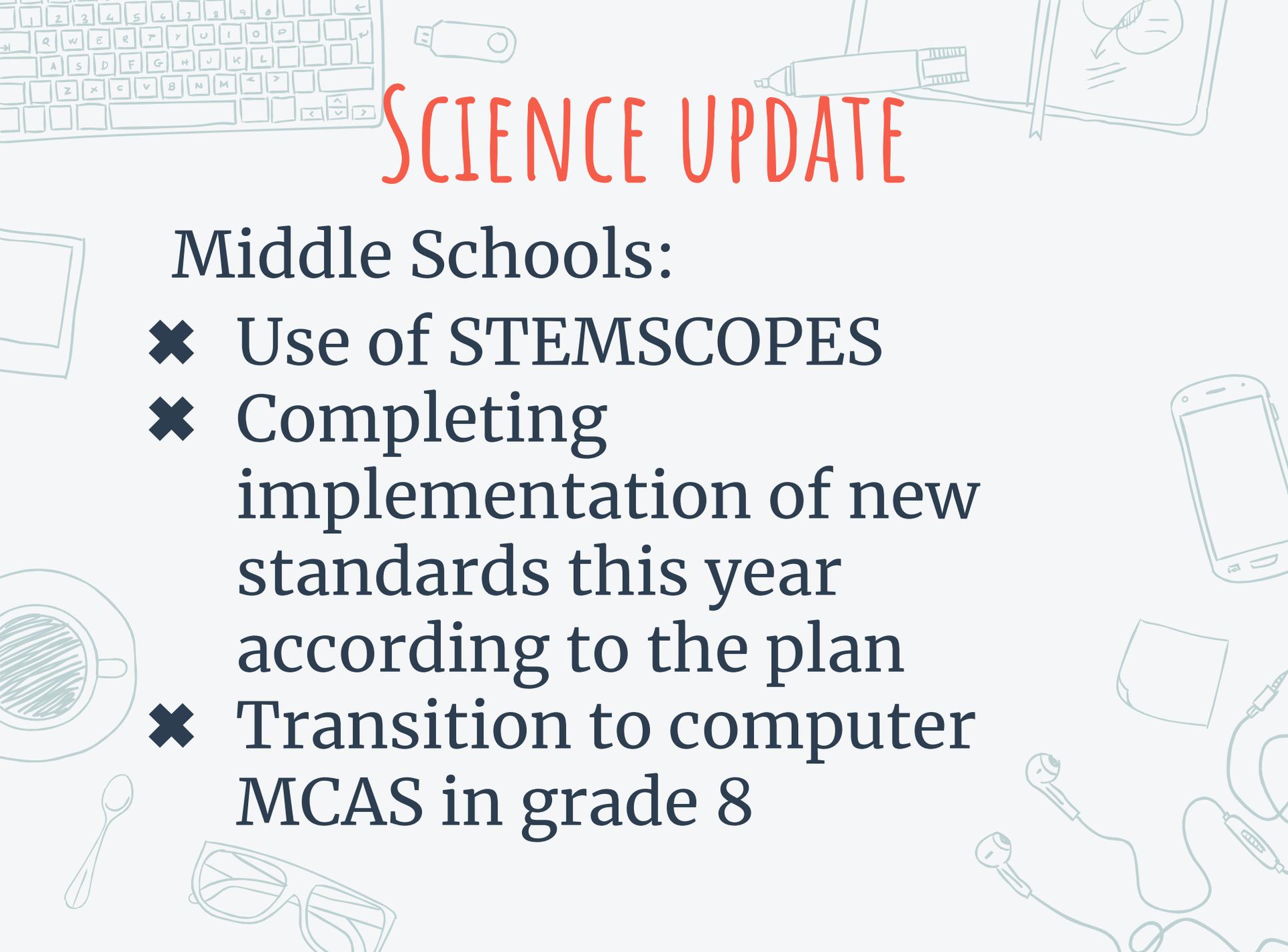




# SCIENCE UPDATE

## Elementary:

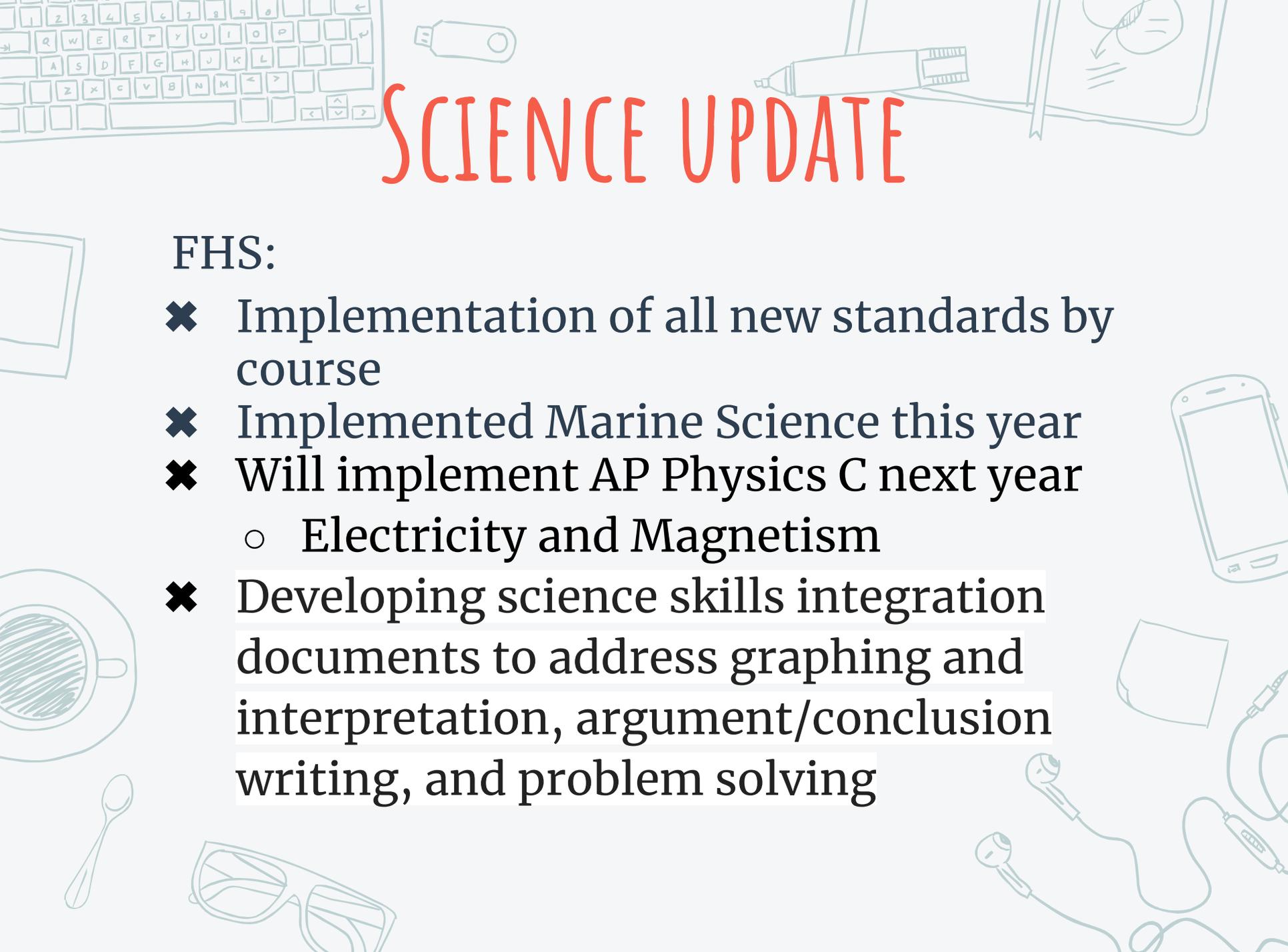
- ✘ Use of STEMSCOPES
- ✘ Implementing Life Science standards this year
- ✘ PD in Physical Science this spring for implementation next year
- ✘ Transition to computer MCAS in grade 5



# SCIENCE UPDATE

## Middle Schools:

- ✘ Use of STEMSCOPES
- ✘ Completing implementation of new standards this year according to the plan
- ✘ Transition to computer MCAS in grade 8



# SCIENCE UPDATE

FHS:

- ✘ Implementation of all new standards by course
- ✘ Implemented Marine Science this year
- ✘ Will implement AP Physics C next year
  - Electricity and Magnetism
- ✘ Developing science skills integration documents to address graphing and interpretation, argument/conclusion writing, and problem solving



# SCIENCE UPDATE

## Next Steps:

- ✘ Continue implementation of new standards with professional development-elementary
- ✘ Monitor effectiveness of STEMSCOPES as a resource
- ✘ Integration of literacy and math into STEM topics
- ✘ Begin to develop common assessments to track student growth and share best practices

# MATHEMATICS UPDATE

## Coffee Consumption of FHS Students

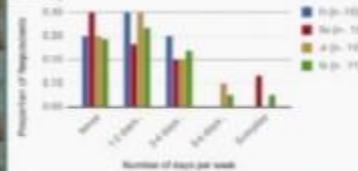
**Hypothesis:** Older students will consume more coffee

**Research:** 75% of teenagers consume a caffeinated drink daily

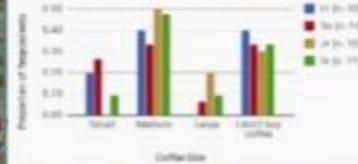
The recommended caffeine intake for teens is 100mg (One cup of coffee is twice this amount)

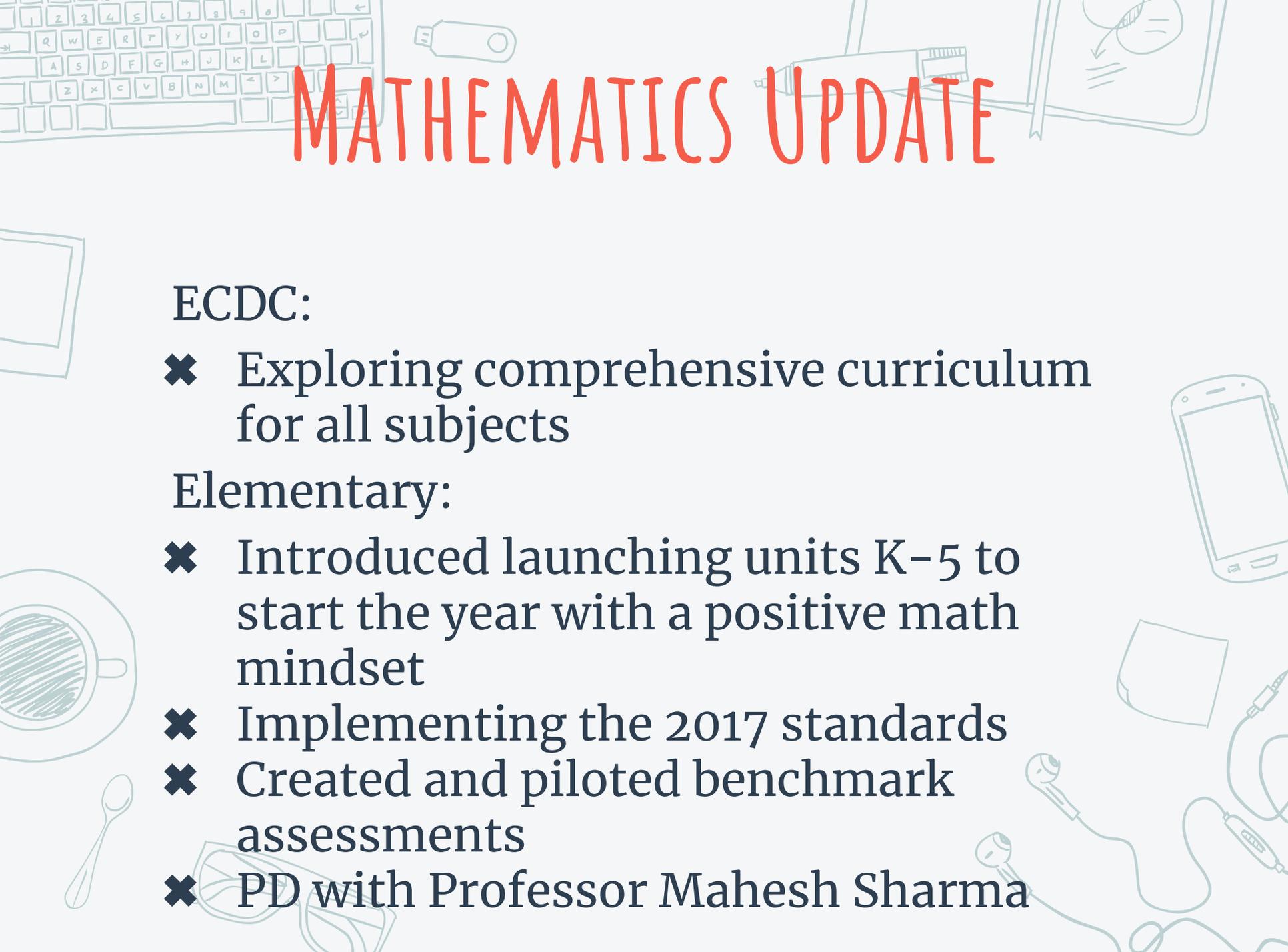


How often do you buy coffee? (According to Class)



What size coffee do you buy? (According to Class)





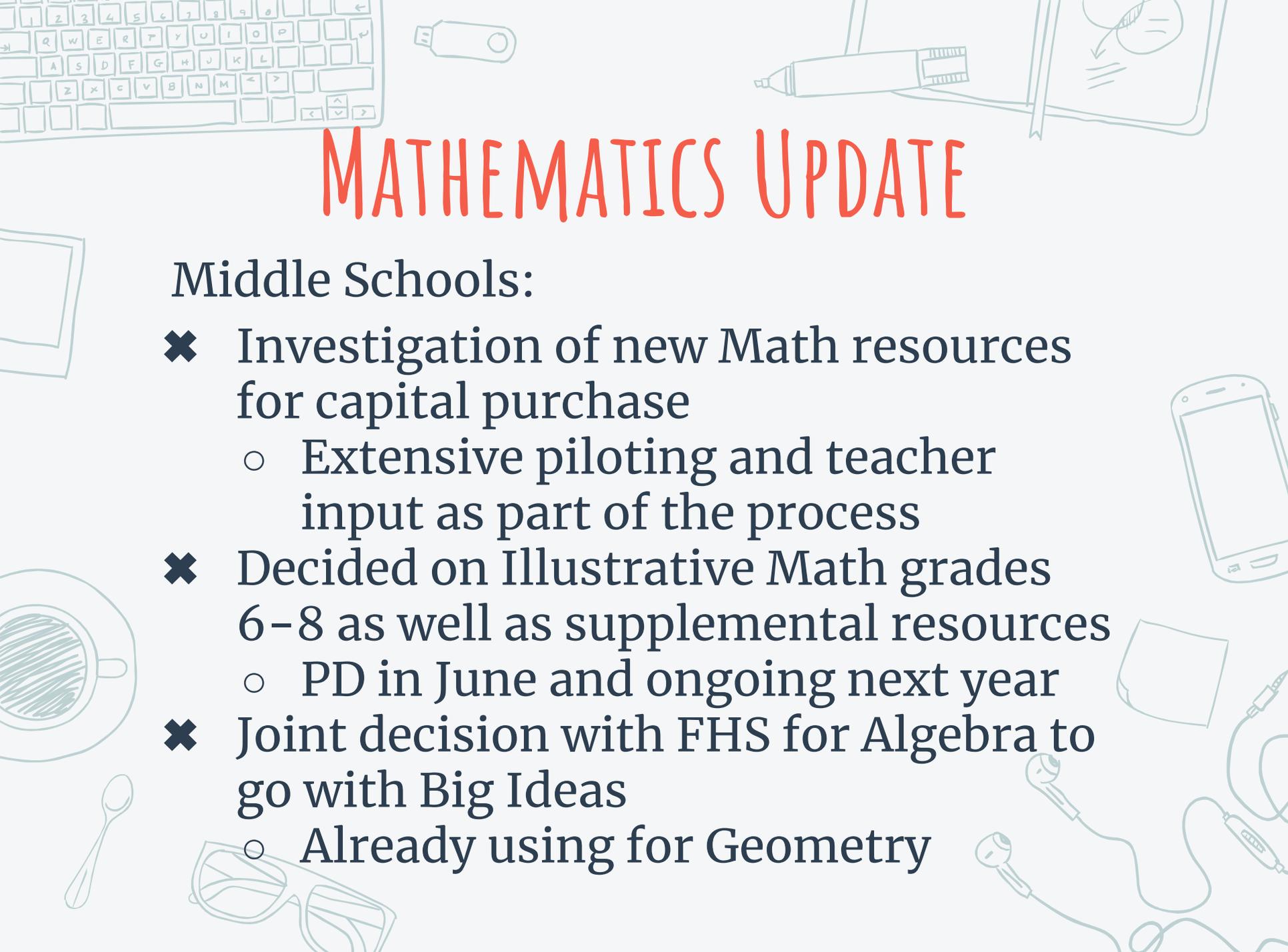
# MATHEMATICS UPDATE

ECDC:

- ✘ Exploring comprehensive curriculum for all subjects

Elementary:

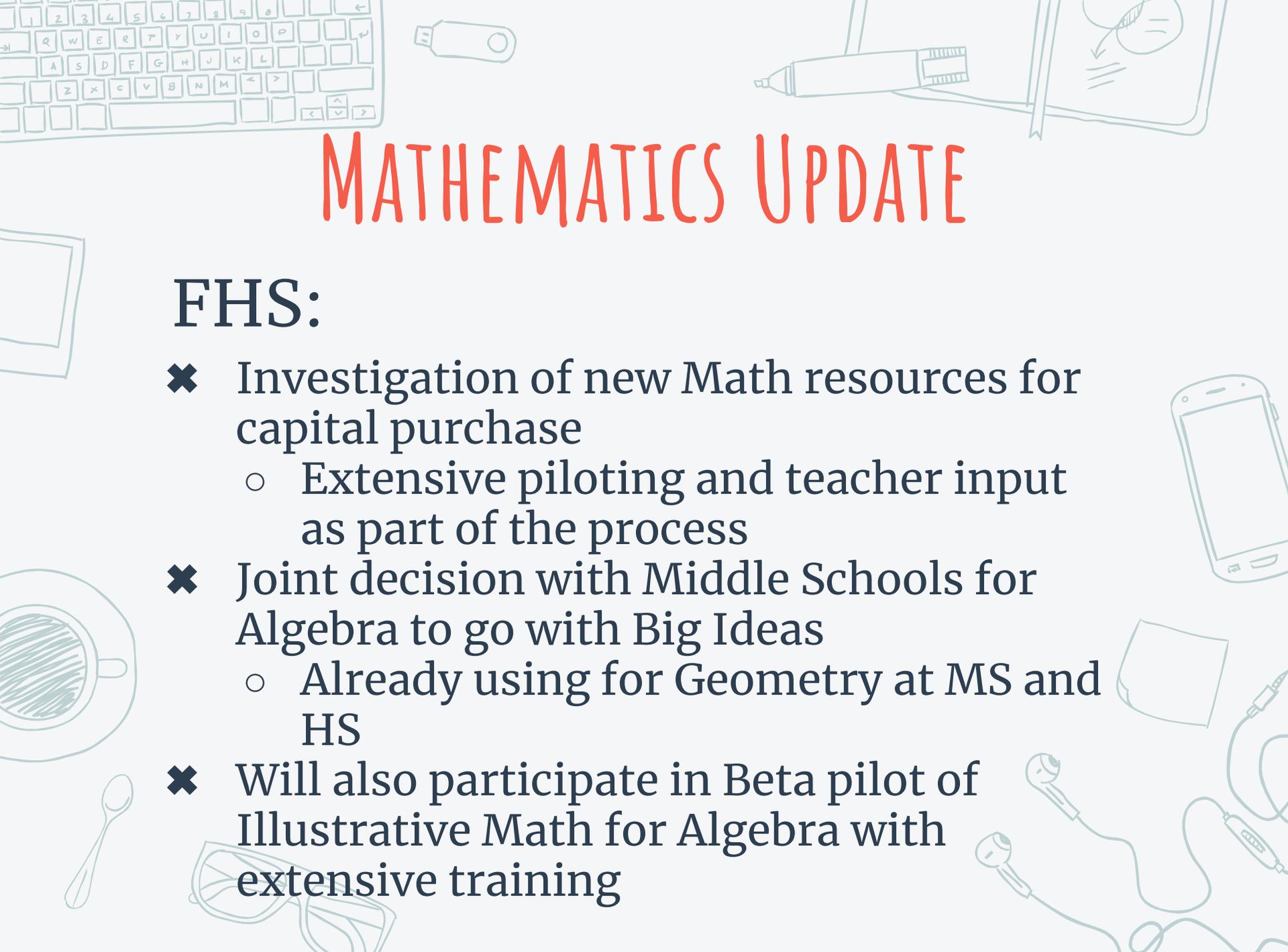
- ✘ Introduced launching units K-5 to start the year with a positive math mindset
- ✘ Implementing the 2017 standards
- ✘ Created and piloted benchmark assessments
- ✘ PD with Professor Mahesh Sharma



# MATHEMATICS UPDATE

## Middle Schools:

- ✘ Investigation of new Math resources for capital purchase
  - Extensive piloting and teacher input as part of the process
- ✘ Decided on Illustrative Math grades 6-8 as well as supplemental resources
  - PD in June and ongoing next year
- ✘ Joint decision with FHS for Algebra to go with Big Ideas
  - Already using for Geometry

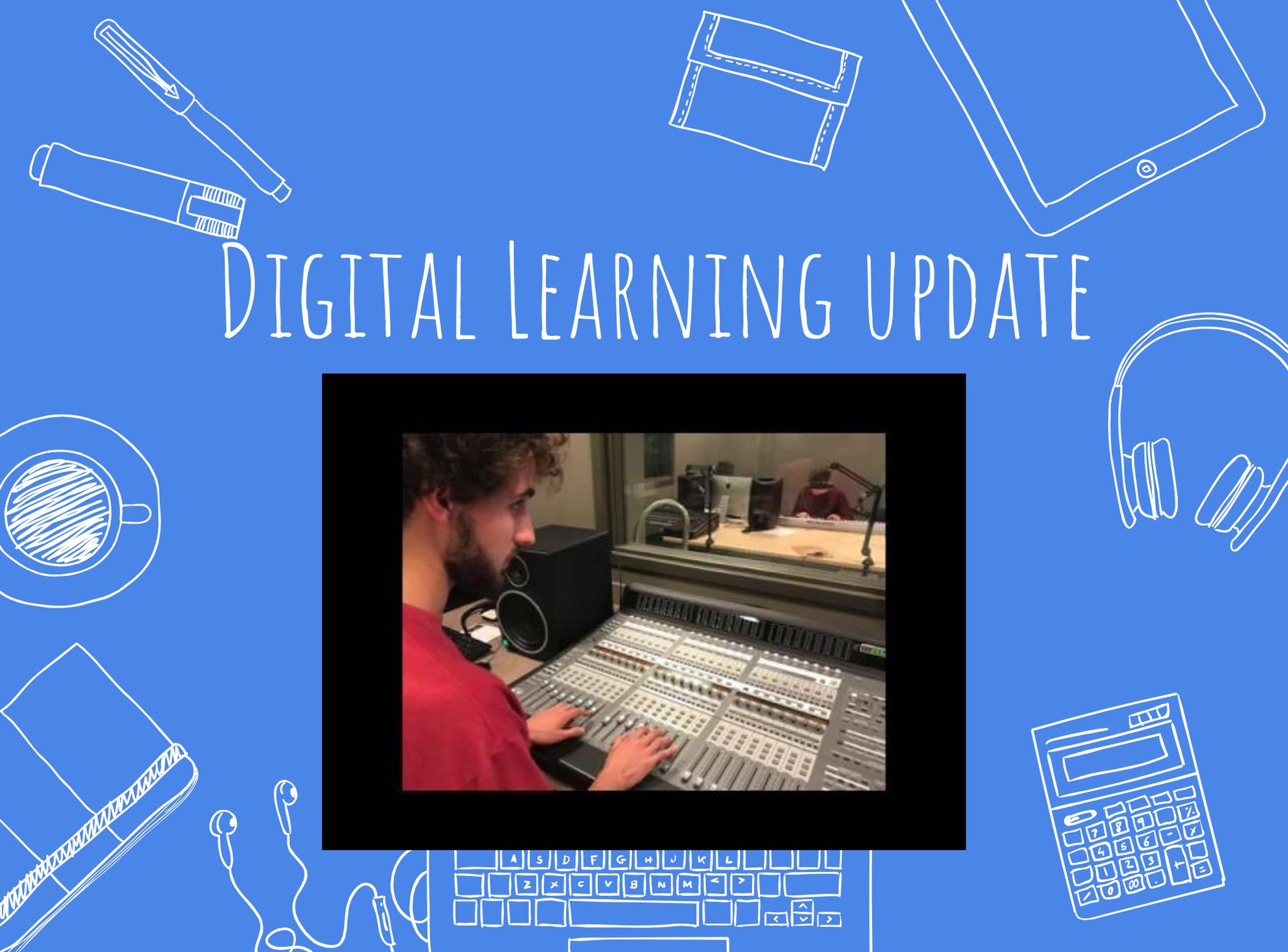


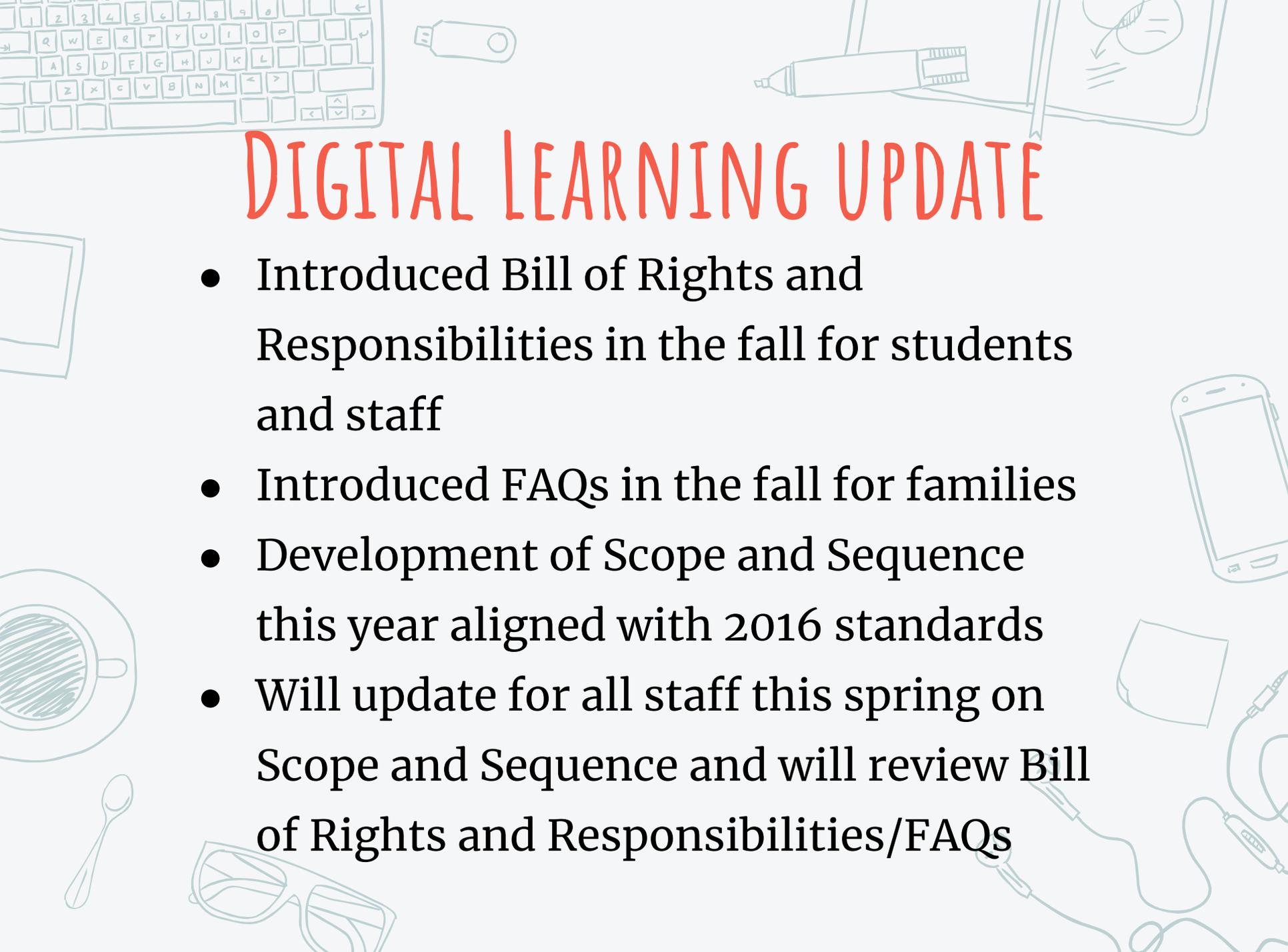
# MATHEMATICS UPDATE

## FHS:

- ✘ Investigation of new Math resources for capital purchase
  - Extensive piloting and teacher input as part of the process
- ✘ Joint decision with Middle Schools for Algebra to go with Big Ideas
  - Already using for Geometry at MS and HS
- ✘ Will also participate in Beta pilot of Illustrative Math for Algebra with extensive training

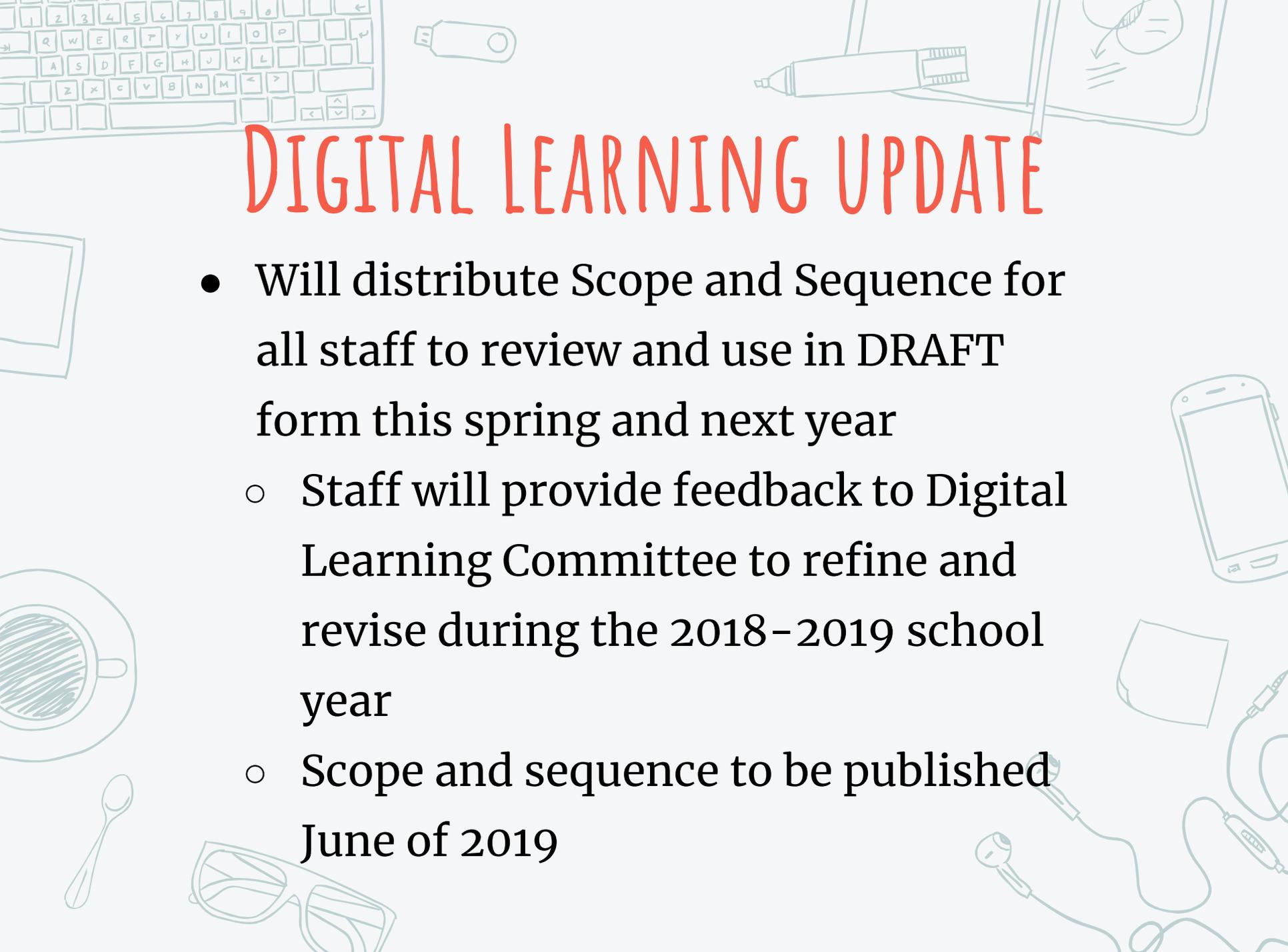
# DIGITAL LEARNING UPDATE





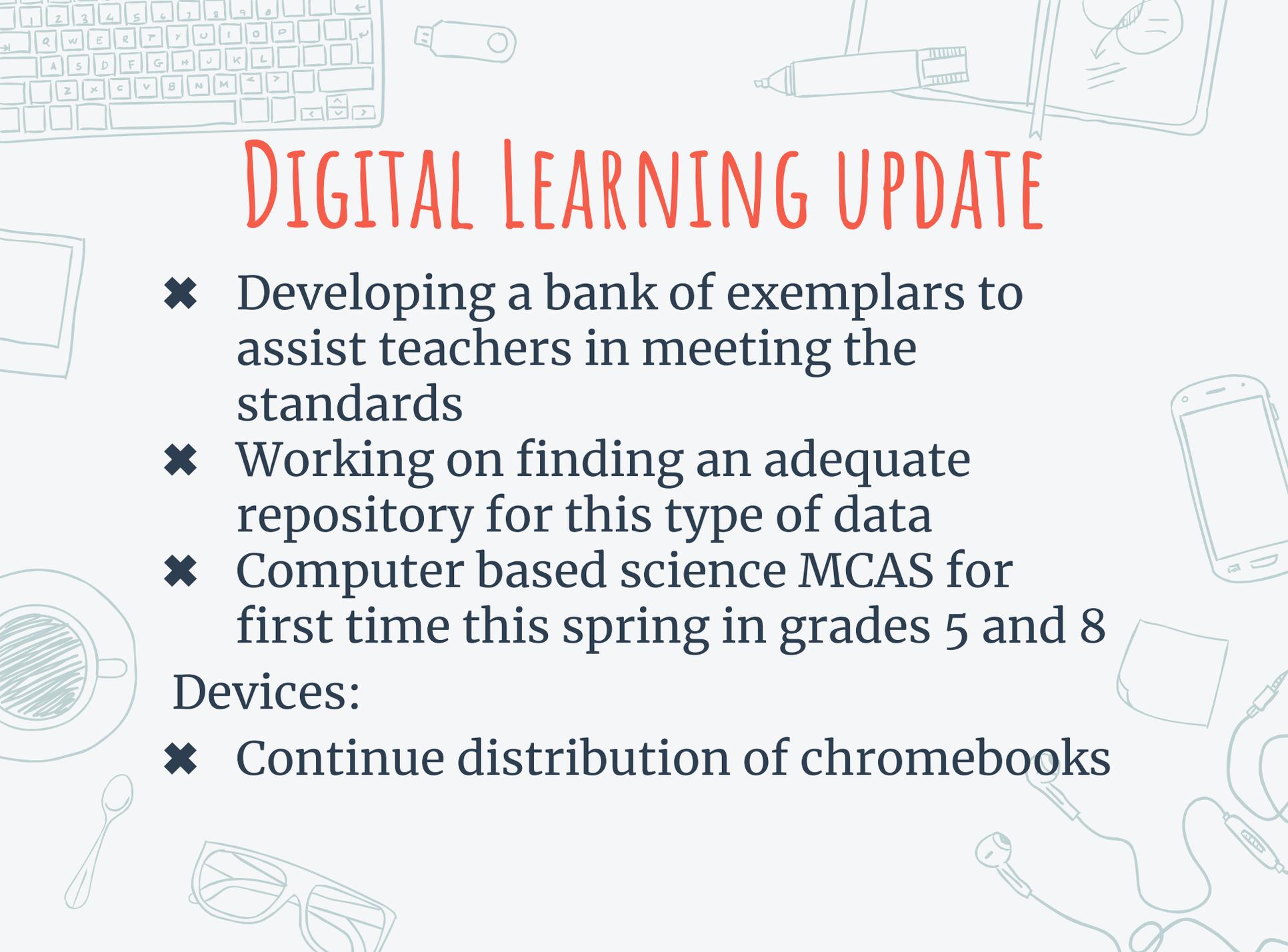
# DIGITAL LEARNING UPDATE

- Introduced Bill of Rights and Responsibilities in the fall for students and staff
- Introduced FAQs in the fall for families
- Development of Scope and Sequence this year aligned with 2016 standards
- Will update for all staff this spring on Scope and Sequence and will review Bill of Rights and Responsibilities/FAQs



# DIGITAL LEARNING UPDATE

- Will distribute Scope and Sequence for all staff to review and use in DRAFT form this spring and next year
  - Staff will provide feedback to Digital Learning Committee to refine and revise during the 2018–2019 school year
  - Scope and sequence to be published June of 2019



# DIGITAL LEARNING UPDATE

- ✘ Developing a bank of exemplars to assist teachers in meeting the standards
- ✘ Working on finding an adequate repository for this type of data
- ✘ Computer based science MCAS for first time this spring in grades 5 and 8

Devices:

- ✘ Continue distribution of chromebooks

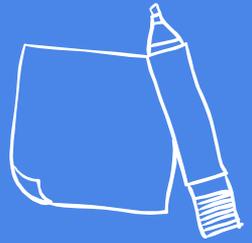


# PI VIDEO FROM REMINGTON MIDDLE SCHOOL

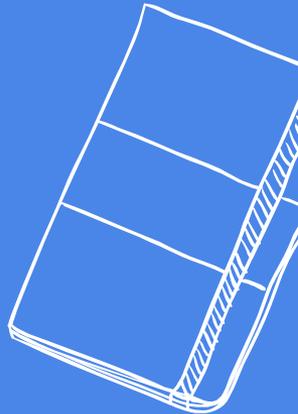
Enjoy!

<https://youtu.be/lo6WV5e09hk>





THANKS!  
**Any questions?**





## CREDITS

Special thanks to all the people who made and released these awesome resources for free:

- ✘ Presentation template by [SlidesCarnival](#)
- ✘ Photographs by [Unsplash](#)