

Biology: the digestive system

Orientation

What do you know about the digestive system?

Vocabulary

Check you know what the words on the cards mean and how to pronounce them.

Pronunciation

digestion /dɑː'dʒestʃən/

saliva /sə'lɑːvə/

intestine /ɪn'testɪn/

muscle /mʌsl/

peristalsis /perɪ'stælsɪs/

blood /blʌd/

stomach /'stʌmək/

paste /peɪst/

chewing /tʃuːwɪŋ/

squeezing /skwiːzɪŋ/

acids /'æsɪdz/

Procedure

- 1 Put the words and phrases into what you think is the correct order.
- 2 Listen to the text and check they are in the correct order.
- 3 Practise telling your partner about the digestive system using the words and phrases.
- 4 Work with your partner to reconstruct the text and produce a written version. You will need to be ready to read your text aloud to the class.
- 5 Compare your written version with the original text.

Original text: © Oxford Student's Dictionary for learners using English to study other subjects (OUP)

When you eat something your chewing and saliva turn the food into a paste. Swallowing sends it to the stomach where acids break it down. Food then passes into the small intestine where digestion continues and useful substances are absorbed into the blood. In a process called peristalsis the circular muscles in the intestine force the food along with a squeezing action. Finally, undigested food passes into the large intestine and your body rids itself of the waste.

chewing and saliva	turn the food into a paste
swallowing	stomach
acids break it down	small intestine
digestion continues	useful substances
absorbed into the blood	peristalsis
circular muscles	squeezing action
large intestine	rids itself of waste

Dictogloss

Dictogloss can be used to help learners identify the key words and information in a text when listening. It can also be used to reinforce vocabulary items as well as cover a wide range of grammatical forms and linkers for expressing ideas.

Procedure

- 1 Tell learners you are going to read or play a recording of a short text and they do not need to try and understand every word in the text.
- 2 Before they listen, ask them some gist questions to help them identify the context of the text and to focus them on the main content, e.g.
 - Where do you think you could hear/read this text?
 - What is it generally about?
- 3 After getting feedback, tell them they will hear the text again, but this time they must write down just the **key words and phrases** and important information in the text.
- 4 After listening, let learners compare their list of key words. If necessary, read/play the recording of the text once more.
- 5 Check they have most of the key words, understand them, and can pronounce them.
- 6 Next, tell the learners to work in groups and produce their own written version of the text.
- 7 Learners can compare their text with those produced by other groups.
- 8 If you wish, you can ask some of the groups of learners to read out their reconstruction of the text.
- 9 Next, ask learners to compare their version of the text with the original version and make any changes to their text which they think are necessary.
- 10 Ask learners what changes they made. Answer any questions learners have about their version of the text. Accept and praise correct alternative expressions of the content.

Advantages

The procedure for dealing with dictogloss is straightforward and it has the added advantage that the teacher can write their own short text around a topic to use with any level of class, and build into it the structures and key words the teacher would like to draw to the attention of the learners.

Features of dictogloss

- 1 It adopts a learner-centred approach to content and language.
- 2 It works well with mixed ability classes.
- 3 It is flexible - different learners notice different content and language features.
- 4 It motivates learners – they want to know if their text is correct or not, and why.
- 5 It is more memorable than the teacher just giving a presentation and explanation.
- 6 It covers a wide range of grammatical forms and key lexis in one lesson.

Background theory.

Dictogloss works for learning both content and language. Wajnryb (*Grammar Dictation*, OUP, 1990) claims that dictogloss encourages learners “to find out what they do and do not know” through their attempts to “reconstruct the text” and through “the subsequent analysis of those attempts”. The interaction among the learners means they are actively involved in the learning process. The task makes communication meaningful and facilitates cooperation and participation. It also encourages learner autonomy among the pairs/groups of learners as they have a “common ownership” of the text they produce. For example materials you could use, see *The Structure of the Atom* and *The Digestive System* in this book.

1.2 Listening with key words

Aims LANGUAGE Re-creating a text; understanding key words; listening for key words; practising writing.

OTHER Working in groups.

Materials Coloured card or paper.

Demo subject DESIGN AND TECHNOLOGY

TOPIC Plastics

Alternative PHYSICS Properties of light

subjects FOOD TECHNOLOGY Food safety and hygiene

HISTORY The slave trade

Any text your students need to understand

Preparation

- 1 Select a text which contains important factual information. This could be from the coursebook. Either record it, or use it as a dictation.
- 2 Write a list of several key words or phrases from the text and photocopy enough copies for pairs or small groups of students. Mount the copies on different coloured paper or card and then cut them up so there is one key word or phrase on each slip.

Example

Plastics

Plastics are man-made materials. Plastics have taken the place of traditional materials like woods and metals.

Plastics differ from other materials largely because of the size of their molecules. Most materials have molecules made up of fewer than 300 atoms. Plastics contain thousands of atoms. We call them macromolecules.

Some plastics are derived from natural substances such as animals, insects and plants but most are man-made. These are named synthetic plastics.

Most synthetic plastics come from crude oil but coal and natural gas are also used.

When crude oil is refined, gases are given off. The gases are broken down into monomers. These are chemical substances consisting of a single molecule. Thousands of these are linked together in a process called polymerisation to form new compounds called polymers.

Key words and phrases

man-made materials	take the place of	refined
fewer than 300 atoms	macromolecules	derived from
natural substances	synthetic plastics	crude oil
monomers	compounds called	polymers

Procedure

- 1 Put the students into groups of not more than four.
- 2 Give each group a set of the key words and phrases and tell them these are taken from the text they are about to hear. Give students time to read and help each other understand them. They can ask you for help and use dictionaries.
- 3 Tell the students in each group to share out the slips. While you read out the text they must place the key words in the order in which they hear them. They may hear some words twice but they place the card the first time they hear a word.
- 4 Let them send a 'spy' to the other groups to compare their order. Read or play the text again.
- 5 In their groups they use their ordered key words to help them write the text from memory. This does not have to be word for word as the original.
- 6 Read or play the text again.
- 7 Give students time to edit their texts before taking them in for marking.
- 8 Give the students a copy of the original text, or direct them to the appropriate page of the coursebook.

Variation

This could be a student-generated activity.

- 1 Give different groups or pairs a different text.
- 2 The students select their own key words and write them on different slips of paper.
- 3 Combine two groups or pairs. They take turns to read their texts while the others order the key words.

Acknowledgements

Text taken from www.design-technology.org.

Giving feedback

Giving praise and encouragement

Yes, that's correct. Well done.

Yes, that's much better.

Good.

Fantastic!

Great!

Super!

Splendid!

Brilliant!

Perfect!

Excellent!

Wow!

Dealing with wrong answers

I'm afraid that's not the right answer.

I'm afraid that's incorrect / not quite right.

Commenting on written homework

You did this really well.

You're making excellent progress. See if you can do even better next time.

I'm really impressed by your work.

I really like the work you've done.

This was a good piece of work. Well done.

I enjoyed reading this. It was very good.

This was an impressive piece of work.

Well done. You must have put a lot of time and effort into doing this.

Dealing with homework that is not up to standard

As a general principle it is best to state what you want in positive terms. In other words, say what is needed or what you want rather than criticise something for being unsatisfactory. Criticism is always backward looking, so say what you want in the future.

For example, rather than say "This homework was poorly organised" it is better to say "Your homework needs to be better organised."

Here are some ways of phrasing things positively and being forward looking:

You need to improve ...

You need to work on ...

You need to pay more attention to ...	organisation layout presentation detail the use of section headings proof-reading your work before you hand it in.
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I think there is still room for improvement in the areas of ...

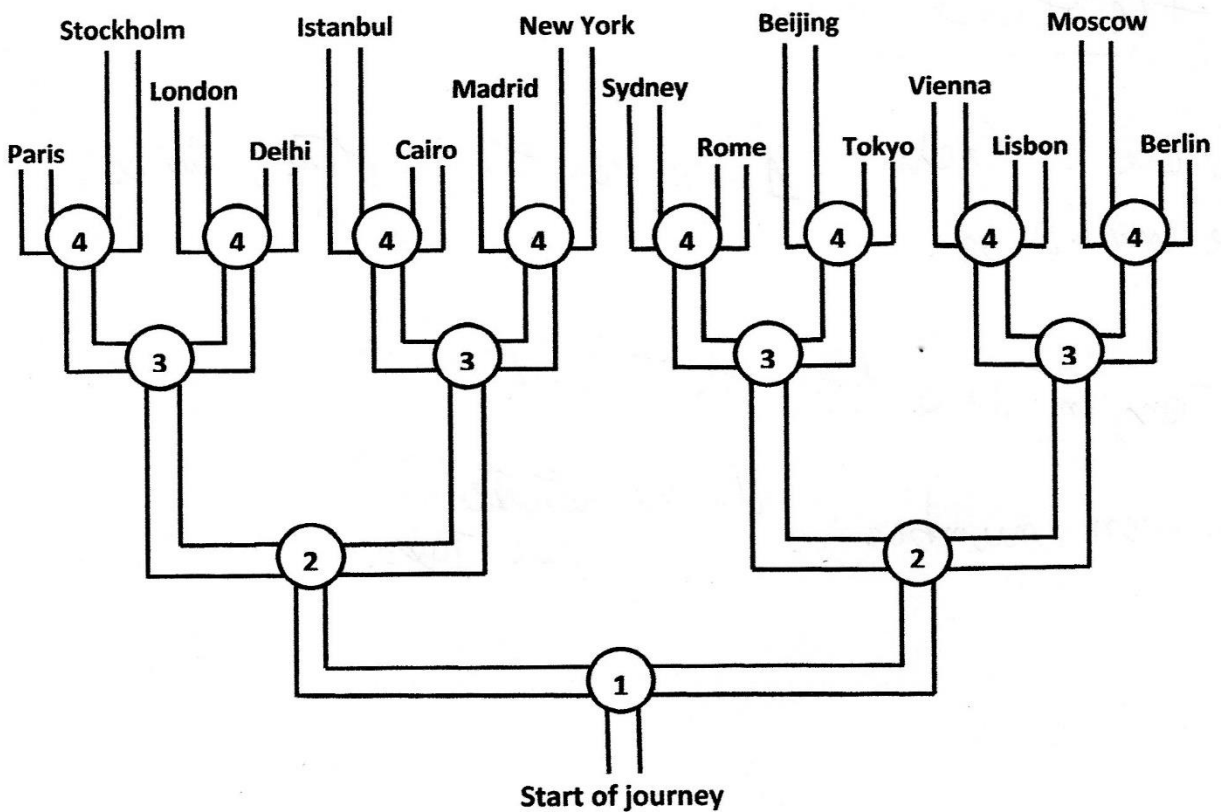
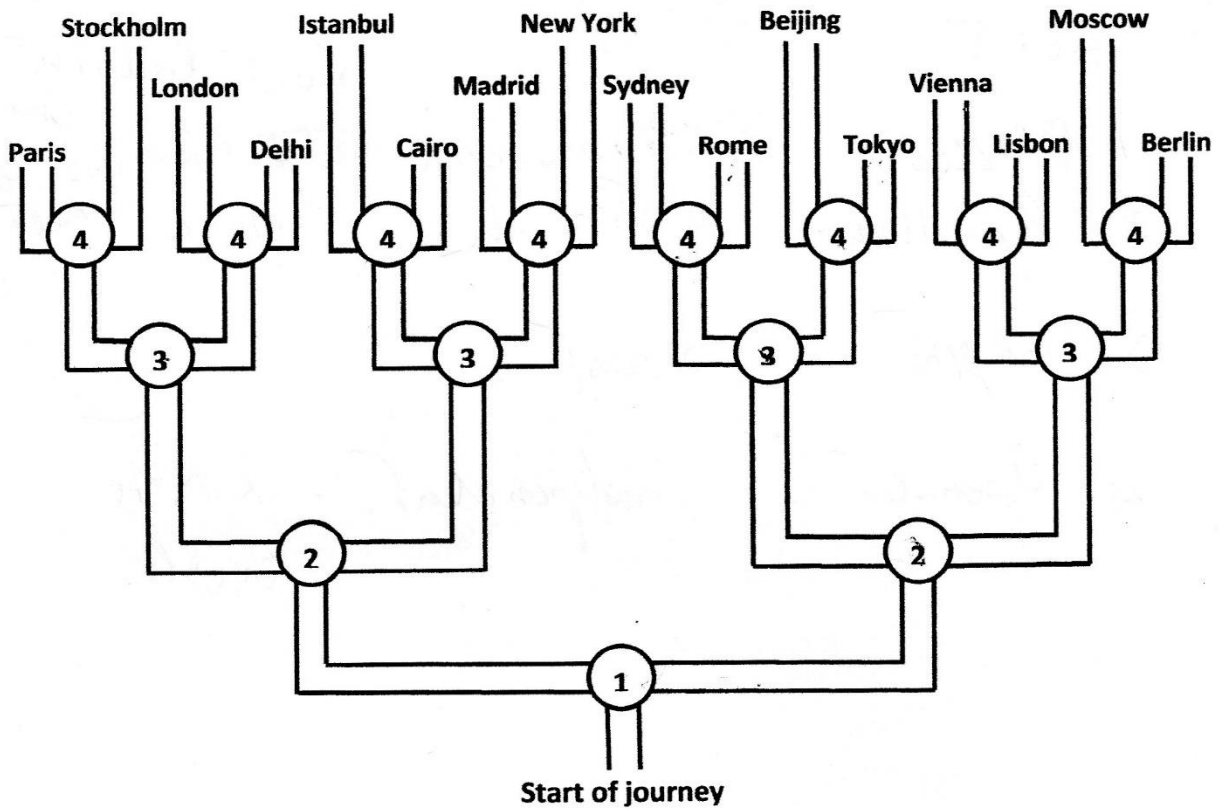
Classroom language 2

Exercise 2 Teacher instructions

Fill in the missing words where they are needed:

- 1 Please turn to page 63 off/in your books.
- 2 This is a picture matching activity. For example, picture A goes with ~~at~~ this word.
- 3 Write your answers on the sheet of paper.
- 4 I'd like you to work out the answers to questions 3 and 4.
- 5 Please take one copy of the handout and pass the rest round the class.
- 6 Please read the text out loud so that we can all hear you.
- 7 Please don't call out the answer. Just put up your hand if you know.
- 8 When I say "now", please turn the paper over and start writing your answers.
- 9 Match the words to the pictures.
- 10 If you know the answer, shout it out.
- 11 Pay special attention to the words in *italics* and in **bold**.
- 12 If you make a mistake, rub it out with an eraser.
- 13 Work in groups and remember to take it in turns to speak.
- 14 If you write the wrong word, please put a line through it.
- 15 It's the end of the lesson so please put away your books.

Check your answers. If any are wrong, highlight and *learn by heart* the correct answers.



3.9 Odd one out

Outline	Learners discuss which word or picture is the odd one out.
Thinking skills	Comparing and contrasting, reasoning
Language focus	Vocabulary
Language skills	Speaking
Time	20 minutes
Level	A2 and above
Preparation	Scan a chapter in your coursebook. Select groups of four words/concepts/ideas which can be linked in several ways (e.g. <i>table, chair, bed, sofa</i> or <i>emancipation, segregation, integration, assimilation</i>). There should NOT be an obvious odd one out in your groups of four, but several possibilities. Make a table like the one in Box 3.9 for each group of four words. You will need a copy of the table for each group of three learners.

Procedure

- 1 Write four words on the board. Discuss with the class which word could be the odd one out and why. Encourage the learners to think creatively and to come up with a variety of reasons. These might be to do with meaning, colour, number of letters, pronunciation, etc.
- 2 Divide the class into groups of three. Give each group a copy of the table you prepared (Box 3.9).
- 3 Ask the learners to circle the word they feel is the odd one out and to write their reason in the final column.
- 4 Ask the groups in turn to explain some of their choices to a partner or the rest of the class.

Box 3.9: Odd one out

				Reason
table	chair	bed	sofa	
red	blue	yellow	white	
scissors	knife	saw	scalpel	
tape measure	ruler	calliper	compass	
oils	watercolours	crayons	charcoal	

From *CLIL Activities* © Cambridge University Press 2012

PHOTOCOPIABLE

Subject examples

Economics and business studies: *inflation, deflation, recession, crisis*

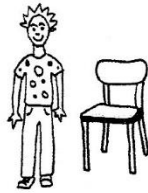
Geography: *volcano, earthquake, tsunami, flood*

Note

This activity is adapted from Leat (2001).

Action time (1)

Stand up!



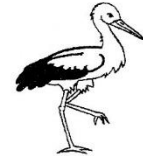
You're a fork.



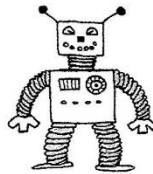
You're a teapot.



You're a stork.



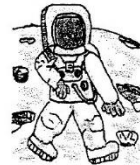
You're a robot.



You're a spoon.



Now you're walking on the moon.



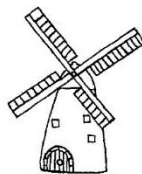
You're a bird flying high.



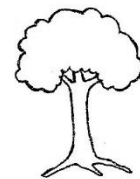
You're a plane in the sky.



You're a windmill.



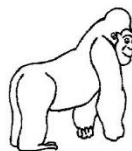
You're a tree.



Now you're swimming in the sea.



You're a gorilla.



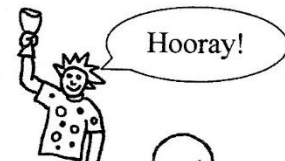
Beat your chest!



You're a lion.



You're the best!



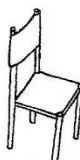
You're a ball.



Bounce up and down.



You're a chair.



Now sit down.



1.13 ABC dictation

Aims LANGUAGE Numbers.

OTHER Reading; re-ordering sentences; cooperative learning; writing and spelling from listening to a text.

Materials One piece of paper, preferably A4, per student.

memo subject PHYSICS

TOPIC Space travel

Alternative FOOD TECHNOLOGY Bacteria in food

subjects PHYSICS The principles of pressure

HISTORY Life story of a historical character

Preparation

- 1 Choose a text.
- 2 Divide the text up into twelve short sentences or phrases which would be easy for your students to listen to and write down. Label them A 1-4, B 1-4, C 1-4 but in random order. In this example the A students have the shortest sentences and the C students the longest, making it suitable for mixed levels.

Example Voyager 1

- A3 Voyager 1 is a spacecraft.
- C4 It has travelled 12 billion km to the edge of our solar system.
- A1 This long trip has taken 30 years
- B3 even though it travels at 35000 mph.
- C2 It will take a further 20000 years to reach the Oort Cloud.
- C1 This cloud consists of comets that surround our solar system.
- B1 Our nearest star is twice as far away as the Oort Cloud.
- A2 It is called Proxima Centauri.
- B4 We will need new modes of space travel to reach this star.
- C3 There are a number of possibilities but none has been tried as yet.

- A4 One idea is to use nuclear power.
- B2 However, this is very controversial.

Procedure

- 1 Divide the class into 3 groups, A, B and C.
- 2 Give each student a piece of paper. Ask them to cut or tear it horizontally into four strips.
- 3 Tell the class you are going to give them a dictation with a difference. They only write down the information if you say their letter, and each time they write they use a different slip of paper. In this way they will be writing four sentences each. Tell them not to panic if they can't do it the first time as they will have an opportunity to get

521

4 Write the title of the text on the board, in this example, 'Voyager 1'. If there are any proper names in the text write these on the board also, in this example, *Oort Cloud* and *Proxima Centauri*. Write up and explain any other words you think may be unfamiliar.

5 Read out the sentences at a reasonable speed. Don't pause between them. Start with A1, followed by B1 and C1, then A2 and so on.

6 Put the students into same letter groups and ask them to choose a messenger. In larger classes there can be a number of smaller groups sharing the same letter. They check their sentences and send their messenger to you if they have any gaps or differences. They must all end up with exactly the same sentences. When they have finished checking, you check one set of papers for each group and that student tells their group any corrections you have made.

7 Put students into groups with at least one A, one B and one C in each. If there is more than one student of the same letter, they need to use only one of their sets of papers. Suggest they choose the set that is easiest to read.

8 As a group they put their slips of paper into the right order. They probably won't have realised that you read the text in jumbled order!

9 Read out the text, this time in the correct order, for the class to check. Alternatively, give everyone a copy of the original.

Variation 1

You can make the activity easier by having four groups, A, B, C, D.

Variation 2

It can also be done as a student-student dictation.

- 1 Dictate the sentences in the correct order, with A1 as the first sentence, B1 the second and so on.
- 2 Put the chart overleaf on the board for the students to copy.
- 3 The students write their sentences next to their own letter and leave gaps to fill in the other letters later.
- 4 Then in ABC groups they dictate their sentences to each other. This is a useful way of avoiding the photocopier, and of getting your students to 'work for' the input.

Acknowledgements

Information taken from www.bbc.co.uk/science/space.

Task language: Sorting things into the correct order

I think this is the first one because ...

This must go here because ...

I think this one comes later because ...

This comes before this one because ...

It can't go here because ...

Yes, I agree. It must go here.

It could go here. What do you think?

But that can't be right because ...

I'm not sure you're right because ...

Yes, that's right.

We've finished.

The Fun They Had

Isaac Asimov

Margie even wrote about it that night in her diary. On the page headed May 17, 2155, she wrote, "Today Tommy found a real book!"

It was a very old book. Margie's grandfather once said that when he was a little boy his grandfather told him that there was a time when all stories were printed on paper.

They turned the pages, which were yellow and crinkly, and it was awfully funny to read words that stood still instead of moving the way they were supposed to - on a screen, you know. And then, when they turned back to the page before, it had the same words on it that it had had when they read it the first time.

"Gee," said Tommy, "what a waste. When you're through with the book, you just throw it away, I guess. Our television screen must have had a million books on it and it's good for plenty more. I wouldn't throw it away."

"Same with mine," said Margie. She was eleven and hadn't seen as many telebooks as Tommy had. He was thirteen.

She said, "Where did you find it?"

"In my house." He pointed without looking, because he was busy reading. "In the attic."

"What's it about?"

"School."

Margie was scornful. "School? What's there to write about school? I hate school." Margie always hated school, but now she hated it more than ever. The mechanical teacher had been giving her test after test in geography and she had been doing worse and worse until her mother had shaken her head sorrowfully and sent for the County Inspector.

He was a round little man with a red face and a whole box of tools with dials and wires. He smiled at her and gave her an apple, then took the teacher apart. Margie had hoped he wouldn't know how to put it together again, but he knew how all right and, after an hour or so, there it was again, large and black and ugly with a big screen on which all the lessons were shown and the questions were asked. That wasn't so bad. The part she hated most was the slot where she had to put homework and test papers. She always had to write them out in a punch code they made her learn when she was six years old, and the mechanical teacher calculated the mark in no time.

The inspector had smiled after he was finished and patted her head. He said to her mother, "It's not the little girl's fault, Mrs. Jones. I think the geography sector was geared a little too quick. Those things happen sometimes. I've slowed it up to an average ten-year level. Actually, the over-all pattern of her progress is quite satisfactory." And he patted Margie's head again.

Margie was disappointed. She had been hoping they would take the teacher away altogether. They had once taken Tommy's teacher away for nearly a month because the history sector had blanked out completely.

So she said to Tommy, "Why would anyone write about school?"

Tommy looked at her with very superior eyes. "Because it's not our kind of school, stupid. This is the old kind of school that they had hundreds and hundreds of years ago." He added loftily, pronouncing the word carefully, "Centuries ago."

Margie was hurt. "Well, I don't know what kind of school they had all that time ago." She read the book over his shoulder for a while, then said, "Anyway, they had a teacher."

"Sure they had a teacher, but it wasn't a regular teacher. It was a man."

"A man? How could a man be a teacher?"

"Well, he just told the boys and girls things and gave them homework and asked them questions."

"A man isn't smart enough."

"Sure he is. My father knows as much as my teacher."

"He can't. A man can't know as much as a teacher."

"He knows almost as much I betcha."

Margie wasn't prepared to dispute that. She said, "I wouldn't want a strange man in my house to teach me."

Tommy screamed with laughter, "You don't know much, Margie. The teachers didn't live in the house. They had a special building and all the kids went there."

"And all the kids learned the same thing?"

"Sure, if they were the same age."

"But my mother says a teacher has to be adjusted to fit the mind of each boy and girl it teaches and that each kid has to be taught differently."

"Just the same, they didn't do it that way then. If you don't like it, you don't have to read the book."

"I didn't say I didn't like it," Margie said quickly. She wanted to read about those funny schools.

They weren't even half finished when Margie's mother called, "Margie! School!"

Margie looked up. "Not yet, mamma."

"Now," said Mrs. Jones. "And it's probably time for Tommy, too."

Margie said to Tommy, "Can I read the book some more with you after school?"

"Maybe," he said, nonchalantly. He walked away whistling, the dusty old book tucked beneath his arm.

Margie went into the schoolroom. It was right next to her bedroom, and the mechanical teacher was on and waiting for her. It was always on at the same time every day except Saturday and Sunday, because her mother said little girls learned better if they learned at regular hours.

The screen was lit up, and it said: "Today's arithmetic lesson is on the addition of proper fractions. Please insert yesterday's homework in the proper slot."

Margie did so with a sigh. She was thinking about the old schools they had when her grandfather's grandfather was a little boy. All the kids from the whole neighborhood came, laughing and shouting in the schoolyard, sitting together in the schoolroom, going home together at the end of the day. They learned the same things so they could help one another on the homework and talk about it

And the teachers were people. . .

The mechanical teacher was Hashing on the screen: "When we add the fractions $\frac{1}{2}$ and $\frac{1}{4}$. . ."

Margie was thinking about how the kids must have loved it in the old days. She was thinking about the fun they had.

The Fun They Had

Glossary

crinkly = (adjective) with many small lines and folds, not flat

attic = the space or room at the top of a building under the roof

slot = a straight narrow opening in a machine where you can put money, cards, etc.

punch code = cards or paper with holes in them for programming a computer (used in the past)

to gear something = to use mechanical wheels that can be adjusted for different speeds

to pat someone on the head = to touch someone gently and approvingly with the flat of your hand on the top of their head

to say something loftily = to say something in a superior way in order to show the person has greater knowledge than other people

"I betcha" = an informal spoken way of saying "I will bet money that this is true"

Task

Without using the internet, decide when you think the story was written. Be ready to explain why you think this is the correct date.

Discussion:

"My mother says a teacher has to be adjusted to fit the mind of each boy and girl it teaches and that each kid has to be taught differently."

Do you agree that teachers should be "adjusted" in this way? Why?

How far do you think this is possible when teaching a class of learners?

Graham Workman