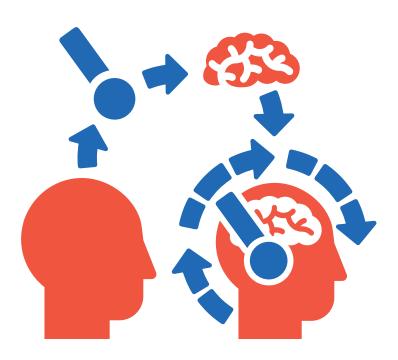


Bernd Sebastian Kamps Monica Limoncino Maurizio Melis

# **OLIENA** {2018~1}

Language recovery after stroke





Bernd Sebastian Kamps Monica Limoncino Maurizio Melis

## **OLIENA**

Language recovery after stroke 2018 English Edition

Google Play™: BSK1.com/oliena

Oliena is supported by the Angels Initiative: www.angels-initiative.com



Flying Publisher

#### **Bernd Sebastian Kamps**

FlyingPublisher.com Amedeo.com Ear2Memory.com

#### Monica Limoncino

Brotzu Hospital Neurorehabilitation Unit Cagliari, Sardinia, Italy

#### Maurizio Melis

Head of the Department of Neurology and the Stroke Unit Brotzu Hospital Cagliari, Sardinia, Italy

Cover: Attilio Baghino
Copy Editor: Rob Camp

#### Disclaimer

The information contained herein is provided "as is" and without warranty of any kind. The contributors to this book, including Flying Publisher, BSK, ML and MM, cannot be held responsible for any errors or omissions or for results obtained from the use of information contained herein.

This work is protected by copyright both as a whole and in part.

 $\ensuremath{\mathbb{C}}$  2018 by Flying Publisher & Bernd Sebastian Kamps

ISBN: 978-3-942687-20-1

Uploaded on 1 February 2018

### **Executive Summary**

Every year, almost 20 million people suffer a first-time stroke and about a third of them have aphasia. Although aphasia often resolves spontaneously, many patients have persistent language disturbances. A conservative estimate of the number of people who require acute post-stroke speech therapy is one to two million each year (China: 200,000, Europe: 100,000, US: 50,000).

Unfortunately, in developing countries, there are few resources for post-stroke speech therapy. There, language recovery often depends on random interactions within families and communities. In developed nations, though most patients do receive treatment, the intensity – a few hours per week over a few months – is categorically considered to be insufficient.

It has recently been suggested that intense daily listening to audio files on smartphone and tablets allows for efficient language learning even in subjects 60 years and older (please visit Ear2Memory.com). Here we present an Android application for aphasic patients (OLIENA 1.0, Google Play™: bsk1.com/oliena) that displays videos of a person pronouncing words or short sentences. Each video is played in a loop until the patient proceeds to the next word. We recommend daily use of at least 30 minutes (better: 60 to 90 minutes!) and, according to personal need and time availability, continuous training for months or years.

OLIENA has interfaces for patients and administrators (caregivers, speech therapists, physicians, etc.).

OLIENA is an open platform for the creation of individualized content (videos, words, pictures) in any language.

OLIENA is free and has no advertising!

### **OLIENA Summary**

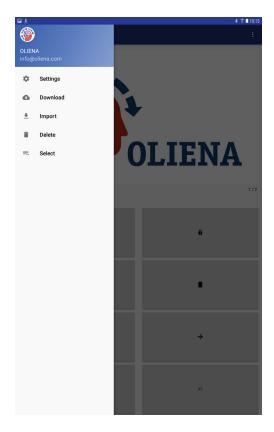
OLIENA (Open Language Interface for Enhanced Network Activity) is a repeat player for short videos and audios, designed and developed for patients with post-stroke aphasia (Google Play™: bsk1.com/oliena; free app, no ads!).



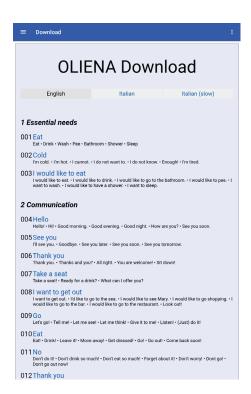
**Figure 0.1** – OLIENA administrator mode. First open the menu (yellow circle top left) and download content. The four main buttons are indicated by the yellow frame.

### Download OLIENA!

First swipe from left to right and click 'Download'.



**Figure 0.2** – Swipe from left to right to open the OLIENA menu and click 'Download'.



**Figure 0.3** –OLIENA content. Click a link and start the download. OLIENA compilations are usually 3 to 10MB in size.

Select a compilation (a bundle of videos and pictures). Depending on the size of the compilation (usually 3 to 10MB) and your internet connection, download may take a few seconds. The basic functions:

- 1. Button (6), "Show next item", the most frequently used button (see Table 0.1, next page).
- 2. After download of two or more compilations, use (7) and (8) to navigate between them.

- 3. Press (2) to enter the listener mode. Modify the default code 0000 if needed. In case you forget your administrator code, remember the **salvage code 1789**.
- 4. Return to the administrator mode via the three vertical dots in the right upper corner.

**Table 0.1** – The 8 OLIENA administrator buttons. The most used buttons are 6, 8, 7 and 5.

Rarely used: defines the maximum number of items displayed for each compilation.     LongClick: Display all.	2. Enter the listener mode.
3. Reactivate all hidden items.	Hide or reactivate the current item in the listener mode.
5. Stop/Play LongClick: Set delay between repeats (0.5 to 10 seconds).	6. Show next item. LongClick: Show last item.
7. Select previous compilation. LongClick: Activate (black) or deactivate (grey) buttons 7 and 8 in the listener mode.	8. Select next compilation. LongClick: Activate (black) or deactivate (grey) buttons 7 and 8 in the listener mode.

For a detailed description of all OLIENA functions, see page 15.

OLIENA items (video + text; video + picture + text) are mostly grouped in compilations of seven. In the current version 1.0, to be completed by April 2018, you will find about 150 word compilations and 30 compilations of short sentences, both in English and Italian. Future OLIENA editions will offer more words, more sentences and more languages.

OLIENA is an open platform where you can **create and import your own content**. For more information, see page 28.

P.S. Other OLIENA applications include learning words and sentences of foreign languages; improving reading and writing skills in young children and adults with no reading skills; and assisting vocabulary-building strategies in memory-intensive areas of study. We also anticipate OLIENA to become a powerful tool for creating and exchanging content in these settings.

### Welcome to OLIENA!

OLIENA is an Ear<sup>2</sup>Memory spin-off. In November 2016, during the launch days of our language learning app, we had dinner with Thomas Kamradt. While discussing learning Greek, Russian, Turkish, Japanese and Chinese with Ear2Memory, Thomas suddenly asked, 'And would it work with aphasic patients too?' A few weeks later, I met Maurizio Melis at the Cagliari Stroke Unit on the 6th floor of Brotzu Hospital, Cagliari, Sardinia, Italy. He was fairly skeptical about my proposal but still introduced me to Monica Limoncino, a speech therapist at the Neurorehabilitation Center a floor above. After a one-hour discussion about language learning and aphasia treatment, Monica and I decided to give Thomas's idea a trial and create a smartphone app for people with aphasia willing to restudy their language every day. As with Ear<sup>2</sup>Memory, we committed ourselves to deliver the best conceivable service and, as always, offer it for free.

In a revival of last year's *Ear*<sup>2</sup>*Memory* exploit, OLIENA was coded by my brother Stephan who made his assembler/machine language computer debut 34 years ago. Without Stephan, there would be no OLIENA.

Bernd Sebastian Kamps

1 February 2018

#### Content

- After a Stroke 13 1.
- The Patient and OLIENA 15 2.
  - 2.1 Patient Acceptance 15
  - Content Selection 16 2.2
  - 2.3 Study Scheme 17
  - 2.4 Clinical Studies 18
  - 2.5 MyOLIENA 18
- OLIENA Step-by-Step 19 3.
  - Administrator Mode 19 3.1
  - 3.2 Listener mode 23
  - 3.3 Activate Extended Listener mode 25
  - 3.4 Settings 27
- MyOLIENA 28 4.
  - Download Ready-to-Use Compilation 30 4.1
    - 4.1.1 OLIENA Inside 30
  - Create Your First OLIENA Compilations 32 4.2
  - 4.3 Use Your Own Videos 34
    - 4.3.1 About shooting individualized videos 35
    - 4.3.2 About naming your OLIENA compilations 36

### 5. MyOLIENA Professional 38

- 5.1 Content 38
  - 5.1.1 Selecting and grouping words 38
  - 5.1.2 Three OLIENA formats 39
  - 5.1.3 Video format 39
  - 5.1.4 Picture format 40
- 5.2 Technical Issues 40
  - 5.2.1 Trimming out single words from a video 40
  - 5.2.2 From camera to OLIENA MP4 videos 40
- 5.3 Film set 41
- 5.4 Importing Your OLIENA Compilations 43
- 5.5 Share your OLIENA Compilations 44
- 6. Future Developments 45
- 7. English Words 49
- 8. English Words (2) 51
- 9. Parole Italiane 63
- 10. Parole Italiane (2) 87

### After a Stroke

The OLIENA app repeats videos of words and short sentences until you click for the next word. If you have recovered from a stroke but still have aphasia, watch a few dozen videos 50, 100 or 200 times and see if this method helps. If it does, download more video compilations and continue studying with OLIENA.

We are aware that some brain lesions exclude recovering past fluency and eloquence; however, even here, studying with OLIENA may be helpful as small increases in speed of speech and more readily accessible words can have a monumental impact on your quality of life.

Recovering from aphasia bears some similarities with learning entirely new languages, in particular with respect to study time and study intensity. For example, learning a new language requires heavy exposure to sound and writing. Adolescents and adults need to read and listen to words and sentences some 100 to 200 times before achieving unconscious and word-by-word understanding of oral speech and being fluent in speaking.1 In-depth

<sup>&</sup>lt;sup>1</sup> In an ongoing experiment, we are comparing the study time to full comprehension of three hours of Chinese audio files in two subjects 13 and 63 years old. The subjects use Ear<sup>2</sup>Memory and Assimil Chinese. The daily updated worksheets are available at BSK1.com/ChineseFelix and BSK1.com/ChineseBSK. Thirteen-year-old Félix will certainly do better than BSK, but the magnitude of 'youth advantage' ("How long will Félix need to achieve the same result as BSK? Fifty percent of BSK's time? Or 60%? Or 70%?) is not known. The final result will help convince adolescents to cash in on their youth in order to accumulate as much

learning of new languages requires years of study, not months, and is one of the most time-consuming tasks in life – like improving aphasia.

If OLIENA improves your expressiveness, however slightly, continue watching and listening to the videos 30, 60 or 90 minutes per day. Divide your study time into sessions of 10 to 15 minutes. Time is the key to success because language is the most complex skill we acquire in our lifetime. All of us, with or without aphasia, continue developing this skill all life long.

#### More

- Full OLIENA description: page 19.
- Producing your own OLIENA content: page 28.
- Words and sentences included in the OLIENA compilations:
  - o English: page 49
  - o Italian: page 63

knowledge as possible; and remind adults that old age is no obstacle to acquiring new skills.

### The Patient and OLIENA

In the early days after a stroke, patients may not be able to manage the OLIENA app without help. In these cases, caregivers, speech therapists and physicians will prepare the app and monitor its use.

From our experience with second-language acquisition (please see www.Ear2Memory.com) we hypothesize that patients with post-stroke aphasia will benefit from intense language exposure. 'Intense exposure' means hundreds of exposures to single words and sentences. Daily exercises would be not less than 30 minutes, ideally longer (60 to 90 minutes if the patient agrees). We expect the best results with continuous training for periods of 6 months to years.

Preparing OLIENA for a patient consists of selecting the content and of downloading the videos (see the Summary, page 3). Before selecting the content, see the complete list of words and sentences included in the OLIENA compilations (English: page 49; Italian: page 63). A possible study scheme is available for download (page 17).

For a detailed description of all OLIENA functions, see page 19.

#### **Patient Acceptance** 2.1

Caregivers, speech therapists and physicians will first need to understand if patients can handle OLIENA and if they accept listening to the words. (If needed, modify the delay between repeats: longclick the Stop/Play button and select delays of up to 10 seconds.) Then find out

- How long patients listen to each word of a compilation;
- If they accept to listen to more than one round 2. (starting a compilation of 7 videos all over again once, twice or three times);
- How long they can listen in a row; 3.
- How many times per day they accept to study with OLIENA.

#### **Content Selection** 2.2

If a patient qualifies for OLIENA, prepare an individualized study plan. Select from the available OLIENA content (see the English content on page 49 and the Italian content on page 63) those compilations that best fit the patient's abilities and interests. As of February 1, 2018, the OLIENA Download page included compilations in

- English (10)
- Italian (179)
- Italian slow (179)

Within the next months, the total number of word and sentence videos will increase to 1,280. By the end of 2018, we'll have published more words and languages.

The OLIENA compilations (English: page 49; Italian: page 63) are grouped in chapters structured 'inside out', from the patient's inside to the world's outside: first, immediate needs, communication, food, body and clothes; then, home, objects, transport and city; and finally, animals,

flowers, nature, education, professions, science and the world. We intentionally propose more words than most patients can cope with. Caregivers, speech therapists and physicians can thus individualize the OLIENA content to every single patient by

- Downloading the most appropriate compilations;
- Hiding videos or pictures that are deemed difficult 2. or inappropriate.

#### **Study Scheme** 2.3

Finally, whenever possible, design study schemes which present at least one new compilation every day and repeat previous compilations at ever increasing time intervals (see Figure 2.1).

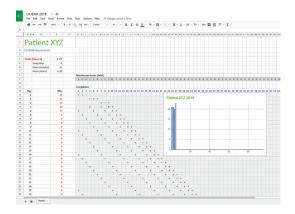


Figure 2.1 – Typical OLIENA worksheet. Presents one new compilation per day and repeats at increasing time intervals. See a typical OLIENA worksheet at www.bsk1.com/worksheet.

#### 2.4 Clinical Studies

We explicitly encourage physicians to test the efficacy of daily study OLIENA sessions in clinical trials. Please contact the authors for any questions.

#### 2.5 MyOLIENA

The OLIENA platform has been designed to let you import videos and pictures tailored to the particular needs of your patients and institution. The OLIENA import process is simple and requires just basic computer skills (detailed discussion on page 28).

### 3. OLIENA Step-by-Step

#### Administrator Mode 3.1

After downloading the OLIENA player from the Google Play™ Store, there is nothing to play – first, you need to download the original OLIENA video compilations. Open the menu (Figure 3.1), click 'Download' and select a compilation (Figure 3.2). OLIENA compilations have generally 7 items of either 'video + text' or 'video + picture + text'.



Figure 3.1 – OLIENA menu. Click 'Download' and select a file. (www.bsk1.com/oliena).

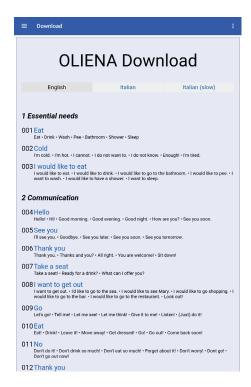


Figure 3.2 – OLIENA Download page. Click a title and start the download

When the download is completed, the first item of the compilation is played back in a loop (Figure 3.3).



Figure 3.3 – After downloading a compilation, the first item is immediately played back in a loop.

You need to download a compilation only once. To select compilations downloaded previously, longclick the video (or the picture when available).

#### More functions:

- 1. Click button 6 (see Table 3.1) and go to the next item; longclick button 6 to return to the previous item.
- After download of more than one compilation, click button 8 and 7 to play the next or last compilation, respectively.
- 3. Click button 5 to stop and resume the loop.
- 4. LongClick button 5 to modify the delay between the repeats of single items (from 0.5 to 10 seconds).
- 5. Click button 4 to hide an item from a patient (the trash icon turns orange). This function is useful if words, sentences or pictures are difficult or inappropriate for a particular patient. To reactivate a hidden item, click button 4 again. To reactivate all hidden items, click button 3 and confirm.
- 6. Button 1 is rarely used. It limits the number of items that are visible to the patient. For example, you can define that only the first five items of EVERY compilation are shown. This function may be useful when several compilations contain huge numbers of items.
  - LongClick button 1 to reset the number of displayed items to 'All'.

Now click button 2 and enter the listener mode. Change the predefined admin code 0000 as needed. If you forget your admin code, remember the OLIENA rescue code 1789.

Table 3.1 - Function of the 8 OLIENA administrator buttons. The most used buttons 6, 8, 7 and 5 are highlighted.

Rarely used: defines the maximum number of items displayed for each compilation.  LongClick: Display all.	2. Enter the listener mode.
3. Reactivate all hidden items.	4. Hide or reactivate the current item in the listener mode.
5. Stop/Play LongClick: Set delay between repeats (0.5 to 10 seconds).	6. Show next item. LongClick: Show last item.
7. Select previous compilation. LongClick: Activate (black) or deactivate (grey) buttons 7 and 8 in the listener mode.	8. Select next compilation. LongClick: Activate (black) or deactivate (grey) buttons 7 and 8 in the listener mode.

#### Listener mode

The OLIENA standard listener mode (Figure 3.4) has just two buttons: on the right a button to move between items (click: next; longclick: last) and on the left the Stop/Play button. When both a video and a picture appear on the screen, the patient may click to enlarge it and click again to return to the twin view.

To **select another compilation**, the patient must **longclick the video or picture**.

To return to the Administrator mode, open the menu (right upper corner), select *Administrator* and enter your admin code (Figure 3.5).



**Figure 3.4** – OLIENA standard listener mode.



Figure 3.5 – Returning to the administrator mode.

#### Activate Extended Listener mode 3.3

As soon as patients are familiar with OLIENA, activate the extended listener mode. In addition to the Next/Last and the Stop/Play buttons, patients will see two buttons below to navigate between compilations.

To activate the extended listener mode, longclick button 7 or 8 (see Table 3.1). The icon color changes from grey to

black. Now return to the listener mode (button 2) and find the *extended* 4-button listener mode (Figure 3.6).



**Figure 3.6** – OLIENA extended listener mode.

#### **Settings** 3.4

Each compilation is about 4 MB in size. To spare your mobile bandwidth, the default settings of OLIENA allow download only when connected to a WI-FI network. To activate the download via mobile networks, open Settings (via the menu) and click "WI-FI and Mobile data". If needed, allow roaming.

If your smartphone or tablet has an external SD card, you can choose where to save the OLIENA compilations. Open Settings (in the menu), click 'Storage Location' and select.

### 4. MyOLIENA

OLIENA (Open Language Interface for Enhanced Network Activity) is an **open** platform — so create your own videos, bind them together, import them, and OLIENA will play them all. Individualized compilations typically contain videos of the patient's life, present and past, and their family and friends.

In addition, the OLIENA import function is useful for languages which are not covered by OLIENA. Anyone willing to translate the OLIENA data set into another language and produce the corresponding videos will have access to our word and sentence database. Contact Bernd Sebastian Kamps for this purpose.

Finally, creating individualized videos may prove invaluable for patients who have lost languages acquired later in life but retain memories from minority languages learned during infancy. The following example shows an Italian dialect called Tabarchin used by less than 10,000 people on a 10 x 10 km island off the Sardinian south-west coast (see Figure 5.1). Download the compilations to your mobile device, then open the OLIENA menu and click 'Import':

www.bsk1.com/MP4/8001Carloforte.zip www.bsk1.com/MP4/8002Carloforte.zip www.bsk1.com/MP4/8003Carloforte.zip



Figure 4.1 – Producing videos for minority languages and dialects. The picture shows Gerolamo, an Italian from Sardinia, speaking a dialect of the Ligurian language. The dialect called tabarchin is today used by less than 10,000 people on a tiny 10 x 10 km island off the Sardinian south-west coast. (Screenshot from 8003Carloforte.zip)

Importing your own videos into OLIENA is straightforward:

- Shoot your videos; 1.
- Bundle them together in an archive zip file; 2.
- 3. Transfer the zip file to an Android device (tablet or smartphone) where OLIENA is installed.

To get familiar with this process, let's start with the last step, #3, and transfer a ready-to-use video compilation to your tablet or smartphone. Later, create a compilation from scratch, using either videos from an OLIENA website (page 32) or your own videos (page 34). Finally, consider realizing a vaster video shooting program, either for use at your institution or for distribution at a national or international level (page 38).

### 4.1 Download Ready-to-Use Compilation

Transferring a 'compilation' (a bundle of videos) to an Android device and import it into OLIENA (step #3 of the last paragraph) will take just minutes. Open www.oliena.com/MyOliena01 and download the zip file www.bsk1.com/MP4/MyOliena01.zip to your Android device. (Downloads are usually saved in the "Download" directory on your smartphone or tablet.) Then open the OLIENA menu, click "Import" and select "MyOliena01.zip". If you never listened to this language, these will now be your first 7 German words. (You'll notice the improvisational quality of the audio recording.)

In the same way, you would import OLIENA compilations downloaded from other websites or sent to you by email by friends or colleagues.

#### 4.1.1 OLIENA Inside

What is inside an OLIENA compilation? MyOliena01.zip is a so-called ZIP file (an archive file). If you open it, you'll discover 7 image files (\*.jpg), 7 audio files (\*.mp3) and the file **import.json** (Figure 4.2).

<b>企[]</b>		<dir></dir>
1130577546	jpg	81.966
<u>1243933696</u>	jpg	120.805
1444509899	jpg	181.348
<u>1527680460</u>	jpg	113.541
<u>2021545308</u>	jpg	19.718
<u>781725199</u>	jpg	32.616
<u></u> 795570471	jpg	82.788
import	json	808
1371063328	mp3	35.525
<u>1550093813</u>	mp3	29.256
1710706627	mp3	27.648
1816583873	mp3	30.928
1840679132	mp3	32.182
<u>737746810</u>	mp3	30.720
<b>754698825</b>	mp3	38.034

Figure 4.2 - Content of MyOliena01.zip: 7 image files (\*.jpg), 7 audio files (\*.mp3) and the file import.json. Import.json tells OLIENA which image file belongs to which audio files and gives them a name.

The file **import.json** is crucial. It tells OLIENA which image files belong to which audio files and gives them a name (here: Sonne, Maus, Ei, Giraffe, Libelle, Ente, Sand). The following code shows how import.json codes the information for the first two words, 'Sonne' and 'Maus':

```
"timestamp": 1511692979,
"createdby": 1,
"media": "1",
"title": "MyOliena01",
"language": "de",
"collection": [
```

```
"id": "1".
  "word": "Sonne",
  "image": "2021545308.jpg",
  "sound": "1816583873.mp3"
  "id": "2",
  "word": "Maus",
  "image": "1444509899.jpg",
  "sound": "1840679132.mp3"
]
}
```

Such code isn't attractive to most of us. Find on the next page a tiny piece of software that will do the coding for you.

#### **Create Your First OLIENA Compilations** 4.2

Now, in the second step (#2), build your first OLIENA compilation from scratch using either

- Videos downloaded from OLIENA.com,
- Videos from your Android device, or
- Videos specifically produced for a given patient or situation.

The production process can be divided into three subtasks:

- A) Downloading a zip file and copy MP4 video files into it:
- B) Preparing 'import.json' (telling OLIENA which video belongs to which word); and, finally,
- C) Transferring the zip file to your Android device. We recommend using a computer for these operations.

### The procedure is simple:

### Task A: Zip file + videos

- Open www.OLIENA.com/MyOliena02 and download 1. the file MyOliena02.zip;
- Download from the same page three to 7 video 2. files:
- 3. Copy the downloaded video files into MyOliena02.zip;

### Task B: Import.json

4. Open http://create.oliena.com/createJson.php, give your compilation a title and click 'Next'. Now fill in the words and the names of the video files as shown in Figure 4.3. (Note that we don't upload the files, just the file names. Note further that you don't need to fill out all rows before clicking 'Finish'.)

Word	Video (.mp4)	
01 Yes	Search Yes.mp4	
02 No	Search No.mp4	
03 Indeed	Search Indeed.mp4	

Figure 4.3 – Creating the file import ison, grouping words and videos (and/or images) for the OLIENA Player.

Once you click 'Finish', a link appears. Download import.json and copy the file, too, into MyOliena02.zip.

### Task C: Transfer and import

- 6. Finally transfer MyOliena02.zip via email to the 'Download' directory of your Android device (alternatives: Bluetooth or USB).
- 7. Open the OLIENA menu, click 'Import' and select your personal OLIENA file.

#### 4.3 Use Your Own Videos

Building OLIENA compilations from your own videos follows the same pattern: copy videos into a zip file; create and add import.json to the zip file; and transfer the zip file to the Download directory of your Android device.

The quality of smartphone videos is usually sufficient for producing OLIENA content.

Please note that OLIENA requires videos to be in the MP4 format. Many Android apps save videos using the MP4

format; if yours don't, try the free app Open Camera (www.bsk1.com/opencamera).

#### 4.3.1 About shooting individualized videos

The number of words that are important to a patient but not included in the OLIENA compilations is huge – just the names of family members run into the dozen. The very first individualized compilations will therefore include videos of the people of the patient's life.

Typical first names in an extended Italian family surrounding a hypothetical aphasic person named Giampiero could be, for example:

> Iride, Agnese, Ivan, Ferruccio, Carlo, Irene, Francesco, Elisa, Virginia, Vittoria, Alessandro, Antonio, Franco, Giuseppe, Massimo, Aldo, Tea, Pardo, Antonella, Serena, Gabriele, Pino, Sandra, Giovanna, Andrea, Francesca, Monica, Annarita, Gigliola, Beatrice, Daniela, Gianni, Lorella, Erika, Giorgia

The ideal film set for producing the corresponding videos? Getting every single person in front of your smartphone and have them pronounce their first name: "Iride". Next actor: "Agnese". Next: "Ivan". In most cases, this procedure is not practical. Alternatively, have just a few people pronounce the names of everyone, family and friends.

A second type of video compilation could comprise place names (streets, villages, cities, hills, rivers, lakes, beaches) or names of neighborhood commercial activities and the names of the people working there. Finally, a third type of video would include the patient's favorite interests and activities.

#### 4.3.2 About naming your OLIENA compilations

When producing your OLIENA compilation, please consider that OLIENA displays downloaded or imported compilations in alphabetical order by title. This means that the title you define in

http://create.oliena.com/createJson.php determines where a compilation appears when a patient selects a new OLIENA compilation.

By adding a prefix (for example 9001, 9002, 9003, as shown in Table 4.1), you'll make sure that in the list of existing compilations, yours will be presented together and in the order you determine.

Table 4.1 – Words and short sentences of three OLIENA compilations. For	r
each compilation, define a title and include a prefix (here 9001 to 9003).	

Title: 9001 Eat	Title: 9002 Cold	Title: 9003 I would like to eat.
Eat	I'm cold.	I'd like to eat.
Drink	I'm hot.	I'd like to drink.
Wash	I cannot.	I'd like to go to the bathroom.
Pee	I don't want to.	I'd like to pee.
Bathroom	I don't know.	I want to wash.
Shower	Enough!	I'd like to have a shower.
Sleep	I'm tired.	I want to sleep.

'Alphabetical order by title' is the reason why you find titles such as "IT2 015 Buon appetito".

The title indicates that it is compilation #15 of OLIENA's Italian edition (IT). It also shows that the video definition is 1280x720px (the '2' in IT2).

In the future, we will also offer low-definition videos of 640x360px for display on smartphones (and quicker download). The corresponding file name would be

"IT3 015 Buon appetito", 3 indicating the lower definition.

As you see, the purely technical aspects of shooting a few videos and integrating them into OLIENA are, all in all, straightforward. Things change dramatically when you consider shooting hundreds of videos for the rehabilitation programs at your institution. Now a bit of upstream conceptual work is needed as well as organizing the production process.

# 5. MyOLIENA Professional

Before producing hundreds or even thousands of videos to be used at your institution or to be shared with the world, decide on the following questions:

- 1. Content: Which words shall we include? Shall we use only videos or videos + images?
- Technical issues: Who will manage the post-2. production?
- 3. Film set: Where, how and with whom shall we shoot the videos?

#### 5.1 Content

# 5.1.1 Selecting and grouping words

First, decide which words or short sentences (hitherto referred to as 'words') to include in your video compilations. Selecting and grouping hundreds or thousands of words will normally require a week to month long collaboration of several people elaborating multiple revisions. Early in the process decide

- How many words to include in a compilation,
- How to group the words, and
- The title of the compilations (remember: OLIENA displayed the title when you open the list of available compilations).

#### 5.1.2 Three OLIENA formats

Second, decide the OLIENA format. OLIENA allows you to import three different types of compilations. Compilations may contain:

- Videos + words
- Videos + pictures + words
- Sound + pictures + words (as 'Sonne, Maus, Ei, 3. Giraffe, Libelle, Ente, Sand' in the example above)

Options 2 and 3 require the selection of suitable images and sometimes clearing copyright restrictions. Option 3 – without videos – doesn't show lip movements and may not be the ideal choice for many patients.

Remember that OLIENA supports landscape format of videos and pictures.

# 5.1.3 Video format

Third, decide which camera to use for the shooting. The quality of high-end smartphone videos is usually adequate for presentation within OLIENA on smartphones, even on tablets. A video resolution of 1280x720 dpi is sufficient.

Keep in mind that OLIENA supports the MP4 video format. Many Android apps produce MP4 files, but some don't. In these cases, try the free 'Open Camera' app (www.bsk1.com/opencamera).

IOS devices (iPhone, iPad) produce videos in MOV format. To convert them into the MP4 format, use free software

such as FFmpeg (www.ffmpeg.org; see below 'Technical Issues').

#### 5.1.4 Picture format

OLIENA supports the **JPG** image format. To resize pictures, we use the batch function of IrfanView (www.irfanview.com/main\_download\_engl.htm).

## 5.2 Technical Issues

# 5.2.1 Trimming out single words from a video

After filming a person who pronounces dozens of words, you will obtain a single large video file of several hundred MB. Cutting this file into short one-word videos is usually more than a minor annoyance. So before going ahead with your planning – and before even thinking about the details of the video shooting! – establish a clear procedure for the production of one-word videos.

Start shooting a video of a person pronouncing 10 words. Now cut the video – and, if needed, convert it – into 10 single MP4 video files. If this procedure is daily bread and butter for you, you have removed the major roadblock of OLIENA mass video production. If not, get assistance from a video specialist and make him check the following paragraph.

# 5.2.2 From camera to OLIENA MP4 videos

For technical guidance, please open www.OLIENA.com/video-production that shows the way

from a smartphone bulk video to single OLIENA MP4 videos. The procedure includes the following steps:

- Introducing key frames into the original video. 1.
- Trimming out single words or sentences. 2.
- In some cases resizing or recoding the videos.

In our own experience, it takes about one hour to produce 100 single-word MP4 videos.

#### Film set 5.3

Before starting to shoot the videos, decide

- Who will be the actors?
- How to create the film set?

Ideally, actors should agree to do more shootings in the future if needed, and the film set should be easily reproducible: same camera, same background, same lighting, and same echo avoidance measures.

The following details deserve particular attention:

- Lighting. Smartphones make better videos in bright conditions (although avoiding direct sunlight). To illuminate the face from below, a white sheet on the floor may be sufficient.
- Echo avoidance. Try and put woolen blankets at 2. some distance on both sides of the head. Also don't speak in front of a wall; instead position the speaker somewhat obliquely to one side.
- Recording words and sentences. Recording simple words or short sentences on video is supposedly

easy, but recording for the purposes of OLIENA is not. Remember: you'll need to trim a video with, for example, 30 words into 30 single videos. To do precise trimming, you need a pause of silence of 0.5 to 1 second before and after saying each word. During the pauses the speaker should fix the lens.

We recommend the following procedure:

- Read the next word from a sheet of paper. a.
- b. Raise the head, fix the lens and wait 0.5 to 1 second.
- c. Say the word.
- d. Continue fixing the lens for 0.5 to 1 second.

Find a recording of four words at www.oliena.com/wpcontent/uploads/2018/01/michael.mp4.

- Lip movements should be exaggerated so that patients can read and interpret them. To make lip movements clearly visible, the head of the speaker should fill out 80-90% of the height of the screen. Remember that OLIENA supports landscape format for videos and pictures.
- Engaging facial expression and a sober smile is de riqueur – keep in mind that some patients will watch the videos for hundreds of hours!

#### **Importing Your OLIENA Compilations** 5.4

Finally, bundle your videos into compilations (see the instructions on page 32 and page 34) and transfer the zip files into the Download directory of your Android device. Open the OLIENA menu and select Import (Figure 5.1).

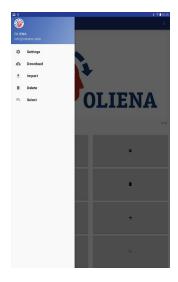


Figure 5.1 - OLIENA menu. Click 'Import' and select a file.

# 5.5 Share your OLIENA Compilations

Do you appreciate the free nature of OLIENA and all its content? Then please consider sharing your own OLIENA compilations with the world. Prepare a web page and offer your content for free download. After downloading your content, people from everywhere can immediately import it into their OLIENA app (Figure 5.1).

# 6. Future Developments

Future OLIENA editions will offer more words, more sentences and more languages.

For updates, please check www.OLIENA.com.

# Annex

# 7. English Words

# 1 | Essential needs

#### 001 Eat

Eat • Drink • Wash • Pee • Toilet • Shower • Sleep

#### 002 Cold

I'm cold. • I'm hot. • I cannot. • I don't want to. • I don't know. • Enough! • I'm tired.

#### 003 I would like to eat

I'd like to eat. • I'd like to drink. • I'd like to go to the bathroom. • I'd like to pee. • I'd like to wash. • I'd like to have a shower. • I want to sleep.

# 2 | Communication

#### 004 Hello

Hello! • Hi! • Good morning. • Good evening. • Good night. • How are you? • See you soon.

# 005 See you

How are you? • I'll see you. • Goodbye. • See you later. • See you soon. • See you tomorrow.

# 006 Thank you

Thank you. • Thanks and you? • Thank you, and you? • All right. • You are welcome! • Sit down!

#### 007 Take a seat

Take a seat! • Ready for a drink? • What can I offer you?

# 008 I want to get out

I want to get out. • I want to go to the sea. • I'd like to see Mary. • I'd like to go shopping. • I want to go to the bar. • I'd like to go to the restaurant. • Look out!

#### 009 Go

Let's go! • Tell me! • Let me see! • Let me think! • Give it to me! • Listen! • Just do it!

#### 010 Eat

Eat! • Drink! • Leave it! • Move away! • Get dressed! • Go! • Go out! • Come back soon!

# 8. English Words (2)

# 1 | Essential needs

001 Eat

Eat

Drink

Wash

Pee

Toilet

Shower

Sleep

# 002 Cold

I'm cold.

I'm hot.

I cannot.

I don't want to.

I don't know.

Enough!

I'm tired.

003 I would like to eat

I'd like to eat.

I'd like to drink.

I'd like to go to the bathroom.

I'd like to pee.

I'd like to wash.

I'd like to have a shower.

I want to sleep.

# 2 | Communication

004 Hello

Hello!

Hi!

Good morning.

Good evening.

Good night.

How are you?

See you soon.

# 005 See you

How are you?

I'll see you.

Goodbye.

See you later.

See you soon.

See you tomorrow.

# 006 Thank you

Thank you. Thanks and you? Thank you, and you? All right. You're welcome! Sit down!

# 007 Take a seat

# Take a seat! Ready for a drink? What can I offer you?

# 008 I want to get out

I want to get out.

I want to go to the sea.

I'd like to see Mary.

I'd like to go shopping.

I want to go to the bar.

I'd like to go to the restaurant.

Look out!

009 Go

Let's go!

Tell me!

Let me see!

Let me think!

Give it to me!

Listen!

Just do it!

010 Eat

Eat!

Drink!

Leave it!

Move away!

Get dressed!

Go!

Go out!

Come back soon!

## 9. Parole Italiane

# 1 | Bisogni elementari

#### 001 Mangiare

Mangiare • Bere • Lavare • Fare la pipì • Bagno • Doccia • Dormire

# 002 Ho freddo

Ho freddo. • Ho caldo. • Non posso. • Non voglio. • Non lo so. • Basta! • Sono stanca.

#### 003 Vorrei mangiare

Vorrei mangiare. • Vorrei bere. • Vorrei andare in bagno. • Vorrei fare la pipì. • Vorrei lavarmi. • Vorrei fare una doccia. • Vorrei dormire.

# 2 | Comunicazione

#### 004 Ciao

Ciao! • Salute! • Buongiorno. • Buonasera. • Buonanotte. • Come stai? • A presto.

#### 005 Come sta

Come sta? • Tanti saluti! • Ci vediamo • Arrivederci. • A dopo. • A presto. • A domani.

#### 006 Grazie

Grazie. • Grazie, e tu? • Grazie, e Lei? • Va bene. • Prego! • Siediti!

#### 007 Accomodati

Accomodati! • Sedetevi! • Accomodatevi! • Gradite qualcosa? • Gradisci qualcosa? • Che cosa ti servo?

#### 008 Vorrei uscire

Vorrei uscire. • Vorrei andare al mare. • Vorrei vedere Maria. • Vorrei fare la spesa. • Vorrei andare al bar. • Vorrei andare al ristorante. • Attento!

#### 009 Vieni

Vieni! • Dimmi! • Fa vedere! • Fammi pensare! • Dammelo! • Ascolta! • Fallo!

#### 010 Mangia

Mangia! • Bevi! • Lascialo! • Spostati! • Vestiti! • Vai! • Esci! • Torna presto!

#### 011 Non farlo

Non farlo! • Non bere tanto! • Non mangiare tanto! • Non pensarci! • Non preoccuparti! • Non andare! • Non uscire adesso!

#### 012 Grazie

Grazie. • Prego. • Che cos'è? • Ti piace? • Ti piacciono? • Perché? • Quando?

#### 013 Permesso

Permesso! • Avanti! • Ben arrivati! • Accomodatevi! • Per favore! • Per piacere! • Per cortesia!

#### 014 Scusa

Scusa. • Aiuto! • Mi dispiace. • Grazie mille. • Non fa niente. • Sono dispiaciuto. • Mi scusi. • Prego, favorisca, non faccia complimenti!

# 015 Buon appetito

Buon appetito! • Buon fine settimana! • Buon viaggio! • Buon compleanno! • Buona Pasqua! • Buon Natale! • Felice anno nuovo!

#### 016 Davvero

Davvero? • Dai! • Sul serio? • Incredibile! • Pazzesco! • Ah sì? • Fantastico! • Non ci credo! • Dimmi tutto!

#### 017 Caspita

Caspita! • Che figata! • Ammazza! • Forte! • Come no! • Chissà? • Magari!

#### 018 Ah

Ah! • Oh! • Ehi! • Mah! • Toh! • Beh? • Ahi! • Aiò! • Eia!

#### 019 Idea

Idea • Problema • Soluzione • Possibilità • Ragione • Difficoltà • Facilità

# 020 Sapere

Sapere • Pensare • Credere • Volere • Ragionare • Progettare • Decidere

#### 021 Facile

Facile • Difficile • Possibile • Impossibile • Semplice • Complicato • Probabile

#### 022 Domanda

Domanda • Risposta • Messaggio • Chiacchiere • Proposta • Racconto • Commento

#### 023 Parlare

Parlare • Chiedere • Rispondere • Raccontare • Chiacchierare • Interrompere • Gridare

#### 024 Auguri

Auguri! • Un successo! • Complimenti! • Congratulazioni! • Che peccato! • Che dispiacere! • Che disperazione!

#### 025 Sì

Sì • No • Infatti • Esatto • Forse • Mai • Niente

#### 026 Bene

Bene • Male • Buono • Cattivo • Contento • Scontento • Imbecille

### 027 Meraviglioso

Meraviglioso • Splendido • Eccezionale • Affascinante • Eccellente • Straordinario • Impressionante

### 028 Meglio

Meglio • Peggio • Ottimo • Pessimo • Assurdo • Strano • Incredibile

#### 029 Caotico

Caotico • Scorretto • Spaventoso • Sgradevole • Insopportabile • Penoso • Che schifo!

# 030 In bocca al lupo

In bocca al lupo! • Tocchiamo ferro! • È andata storta. • Non vedo l'ora di vederti. • Molto fumo e poco arrosto. • Lascia perdere! • Acqua in bocca!

#### 031 Che cosa stai combinando

Che cosa stai combinando? • Giù le mani! • Dai, muoviti! • Ci mancherebbe altro! • Gliel'ho detto chiaro e tondo. • L'ho mandato al quel paese. • È rimasto a bocca aperta.

# 3 | Comunicazione esterna

#### 032 Cellulare

Cellulare • Tablet • Messaggino • Caricatore • Telefono • Numero • Ricarica

#### 033 Accendere

Accendere • Chiamare • Squillare • Spegnere • Ricaricare • Chattare • Giocare

#### 034 Computer

Computer • Laptop • Mouse • Chiave USB • Stampante • Joystick • Mail

#### 035 Internet

Internet • Browser • Account • Nome utente • Password • Sito • Homepage

#### 036 Scrivere

Scrivere • Lettera • Cartolina • Francobollo • Sportello • Posta • Inviare

#### 037 TV

TV • Guardare • Telecomando • Telegiornale • Canale • Programma • Pubblicità

#### 038 Giornale

Giornale • Quotidiano • Leggere • Articolo • Commentare • Situazione • Attuale

# 4 | Cibo

#### 039 Acqua

Acqua • Caffè • Tè • Latte • Cioccolata • Succo di frutta

# 040 Champagne

Champagne • Vino rosso • Vino bianco • Birra • Spumante • Liquore • Cincin!

#### 041 Pane

Pane • Panino • Farina • Pasta • Cornetto • Torta • Biscotto

#### 042 Patata

Patata • Purè • Patate fritte • Frittelle • Riso • Risotto • Arancino

#### 043 Latte

Latte • Panna • Burro • Formaggio • Mozzarella • Ricotta • Yogurt

#### 044 Pesce

Pesce • Tonno • Orata • Spigola • Sogliola • Sardina • Astice

# 045 Aragosta

Aragosta • Scampi • Gambero • Granchio • Calamaro • Seppia • Carne

#### 046 Vitello

Vitello • Manzo • Maiale • Maialetto • Agnello • Capretto • Filetto

#### 047 Cotoletta

Cotoletta • Bistecca • Scaloppina • Fegato • Rene • Cuore • Salsiccia

#### 048 Prosciutto

Prosciutto • Bresaola • Salame • Mortadella • Pancetta • Guanciale

#### 049 Verdura

Verdura • Insalata • Pomodoro • Carota • Cetriolo • Peperone • Melanzana

#### 050 Zucchina

Zucchina • Sedano • Finocchio • Cavolo • Cavolfiore • Broccoli • Zucca

#### 051 Lattuga

Lattuga • Scarola • Bietola • Cicoria • Belga • Radicchio • Spinaci

#### 052 Rucola

Rucola • Fagioli • Lenticchie • Fave • Piselli • Ceci • Soia

# 053 Aglio

Aglio • Cipolla • Scalogno • Peperoncino • Basilico • Prezzemolo

#### 054 Frutta

Frutta • Macedonia • Arancia • Limone • Clementina • Mandarino • Pompelmo

# 055 Fragola

Fragola • Ciliegia • Albicocca • Melone • Pesca • Pescanoce • Anguria

#### 056 Fico

Fico • Uva • Prugna • Castagna • Mela • Pera • Cachi

# 057 Melograno

Melograno • Banana • Dattero • Cocco • Kiwi • Litchi • Ananas

#### 058 Noce

Noce • Nocciola • Noccioline • Mandorla • Pinolo • Pistacchio • Noce del Brasile

#### 059 Oliva

Oliva • Olio d'oliva • Olio di semi • Olio di palma

#### 060 Gelato

Gelato • Cioccolatini • Zucchero • Miele • Marmellata • Dolce • Dessert

#### 061 Prima colazione

Prima colazione • Spremuta • Fetta • Tazza • Bicchiere • Bottiglia • Vassoio

#### 062 Pranzo

Pranzo • Cena • Piatto • Cucchiaio • Forchetta • Coltello • Candela

# 063 Tovaglia

Tovaglia • Tovagliolo • Sale • Pepe • Olio • Aceto • Senape

# 064 Droga

Droga • Tabacco • Sigaretta • Alcol • Spinello • Eroina • Cocaina

# 5 | Corpo

#### 065 Testa

Testa • Orecchio • Occhio • Dente • Gola • Schiena • Seno

#### 066 Stomaco

Stomaco • Pancia • Spalla • Braccio • Mano • Gamba • Piede

#### 067 Testa

Testa • Capelli • Cervello • Faccia • Orecchio • Occhio • Palpebra

#### 068 Naso

Naso • Bocca • Labbro • Dente • Lingua • Gola • Collo

#### 069 Braccio

Braccio • Gomito • Mano • Pugno • Gamba • Ginocchio • Piede

#### 070 Cervello

Cervello • Cuore • Polmone • Stomaco • Fegato • Rene • Prostata

#### 071 Andare

Andare • Venire • Correre • Saltare • Salire • Scendere • Cadere

#### 072 Bello

Bello • Carino • Alto • Basso • Robusto • Snello • Normale

#### 073 Biondo

Biondo • Bruno • Nero • Castano • Grigio • Calvo • Treccia

## 074 Acqua

Acqua • Sapone • Shampoo • Asciugamano • Fon • Spazzola • Pettine

#### 075 Doccia

Doccia • Dentifricio • Spazzolino • Rasoio • Crema • Rossetto • Profumo

# 6 | Persone

#### 076 Nome

Nome • Cognome • Documento • Passaporto • Carta d'identità • Patente • Carta di credito

#### 077 Come ti chiami

Come ti chiami? • Mi chiamo Mario. • Di dove sei? • Quanti anni hai? • Abito in Via Roma. • Hai fratelli e sorelle? • Dove lavori?

#### 078 La mia casa

La mia casa • Il tuo cane • La sua gatta • Il nostro appartamento • La vostra macchina • Il loro lavoro • La mia vita

#### 079 Uomo

Uomo • Donna • Marito • Moglie • Coppia • Figlio • Figlia

#### 080 Babbo

Babbo • Mamma • Fratello • Sorella • Nonno • Nonna • Nipote

# 081 Famiglia

Famiglia • Genitori • Nonni • Suoceri • Cugini • Zio • Zia

#### 082 Amico

Amico • Amica • Vicino • Vicina • Collega • Gruppo • Gente

#### 083 Amicizia

Amicizia • Appuntamento • Salutare • Baciare • Abbracciare • Toccare • Invitare

### 084 Natale

Natale • San Silvestro • Capodanno • Pasqua • Pasquetta • Carnevale • Befana

### 085 Compleanno

Compleanno • Annuncio • Matrimonio • Gravidanza • Nascita • Separazione • Divorzio

### 7 | Abbigliamento

### 086 Pigiama

Pigiama • Camicia da notte • Mutanda • Reggiseno • Maglia • Biancheria • Costume da bagno

### 087 Camicia

Camicia • Camicetta • Jeans • Pantaloni • Gonna • Maglione • Giacca

### 088 Scarpe

Scarpe • Stivali • Sandali • Cuoio • Cappotto • Impermeabile • Cappello

### 089 Macchia

Macchia • Sporco • Lavare • Sapone • Detersivo • Lavatrice • Ferro da stiro

#### 090 Foulard

Foulard • Cintura • Borsa • Guanti • Occhiali da sole • Ombrello • Cravatta

#### 091 Gioiello

Gioiello • Catena • Braccialetto • Orecchino • Perla • Anello • Oro

### 8 | Sentimenti e carattere

#### 092 Amore

Amore • Felicità • Gioia • Simpatia • Stima • Comprensione • Nostalgia

#### 093 Buono

Buono • Gentile • Romantico • Generoso • Coraggioso • Bravo • Forte

### 094 Scherzare

Scherzare • Sorridere • Sorprendere • Esitare • Sbagliare • Tremare • Piangere

### 9 | Concetti astratti

### 095 Tempo

Tempo • Passato • Presente • Futuro • Inizio • Pausa • Fine

### 096 Aspettare

Aspettare • Cominciare • Finire • Breve • Lungo • Primo • Ultimo

#### 097 Prima

Prima • Adesso • Subito • Dopo • Presto • Tardi • Ancora

### 098 Sono le dieci

Sono le dieci. • È mezzogiorno. • È l'una. • Sono le due. • Sono le tre meno un quarto. • Sono le quattro e un quarto. • Sono le cinque e mezzo.

#### 099 Sono le sei e venti

Sono le sei e venti.

### 100 Lunedì

Lunedì • Martedì • Mercoledì • Giovedì • Venerdì • Sabato

#### 101 Domenica

Domenica • Giorno • Settimana • L'altro ieri • Ieri • Oggi • Domani • Dopodomani

#### 102 Gennaio

Gennaio • Febbraio • Marzo • Aprile • Maggio • Giugno • Luglio • Agosto • Settembre • Ottobre • Novembre • Dicembre

#### 103 Anno

Anno • Mese • Stagione • Primavera • Estate • Autunno • Inverno

#### 104 Dove

Dove? • Qui • Lì • Su • Giù • Dentro • Fuori

### 105 Sotto

Sotto • Sopra • A destra • A sinistra • Davanti • Dietro • Ecco!

### 106 Colore

Colore • Chiaro • Scuro • Bianco • Nero • Blu • Azzurro

#### 107 Rosso

Rosso • Giallo • Verde • Arancione • Viola • Rosa • Grigio

#### 108 Zero

Zero • Uno • Due • Tre • Quattro • Cinque • Sei • Sette • Otto • Nove • Dieci

#### 109 Undici

Undici • Dodici • Tredici • Quattordici • Quindici • Diciassette • Diciotto • Diciannove • Venti

#### 110 Ventuno

Ventuno • Ventidue • Ventitré • Ventiquattro • Venticinque • Ventisei • Ventisette • Ventotto • Ventinove

#### 111 Trenta

Trenta • Quaranta • Cinquanta • Sessanta • Settanta • Ottanta • Novanta

#### 112 Cento

Cento • Duecento • Trecento • Quattrocento • Cinquecento • Seicento • Settecento • Ottocento • Novecento

### 113 Mille

Mille • Millecento • Duemila • Duemiladiciotto • Diecimila • Milione • Miliardo

#### 114 Grande

Grande • Piccolo • Pieno • Vuoto • Molto • Poco • Semplice

### 115 Chilometro

Chilometro • Metro • Centimetro • Millimetro • Altezza • Lunghezza • Larghezza

### 10 | Casa

#### 116 Porta

Porta • Serratura • Chiave • Maniglia • Ingresso • Corridoio • Stanza

### 117 Soggiorno

Soggiorno • Cucina • Bagno • Scala • Camera da letto • Camera degli ospiti Studio

### 118 Pavimento

Pavimento • Parete • Soffitto • Finestra • Persiana • Terrazza • Ringhiera

#### 119 Rubinetto

Rubinetto • Acqua • Bagno • Bidè • Vasca da bagno • Gabinetto • Toilette

### 120 Lampadina

Lampadina • Corrente • Presa • Spina • Interruttore • Elettricità • Impianto

### 11 | Stanze

### 121 Frigorifero

Frigorifero • Fornello • Forno • Lavastoviglie • Pattumiera • Macchina del caffè · Radio

#### 122 Pentola

Pentola • Coperchio • Scolapasta • Grattugia • Tegame • Padella • Teglia

#### 123 Tavola

Tavola • Sedia • Tovaglia • Caraffa • Tovagliolo • Cassettone • Tenda

#### 124 Divano

Divano • Poltrona • Tappeto • Televisore • Tavolino • Cassetto • Vaso

#### 125 Letto

Letto • Materasso • Lenzuolo • Guanciale • Coperta • Armadio

#### 126 Water

Water • Carta igienica • Doccia • Vasca • Asciugamano • Lavandino • Specchio

### 12 | Negozi e commerci

### 127 Capitale

Capitale • Città • Quartiere • Porto • Centro • Periferia • Villaggio

#### 128 Via

Via • Strada • Marciapiede • Piazza • Ponte • Parco • Stadio

### 129 Macchina

Macchina • Motore • Ruota • Targa • Faro • Portiera • Finestrino

#### 130 Autostrada

Autostrada • Traffico • Semaforo • Stop • Vigile • Incidente • Ambulanza

#### 131 Aereo

Aereo • Aeroporto • Volo • Pilota • Hostess • Decollo • Atterraggio

#### 132 Treno

Treno • Locomotiva • Vagone • Finestrino • Stazione • Marciapiede • Dogana

### 133 Imbarcare

Imbarcare • Nave • Traghetto • Passeggero • Biglietto • Cabina • Sbarcare

### 134 Frutta e verdura

Frutta e verdura • Panificio • Macelleria • Mercato • Supermercato • Edicola • Posta • Banca

### 13 | Animali

#### 135 Animali

Animali • Gregge • Femmina • Maschio • Coda • Muso • Zampa

### 136 Majale

Maiale • Vitello • Mucca • Cane • Gatto • Capra • Pecora

### 137 Cavallo

Cavallo • Asino • Bue • Toro • Gallo • Coniglio • Cammello

### 138 Scimpanzé

Scimpanzé • Gorilla • Orangutan • Scimmia • Lupo • Orso • Topo

### 139 Tigre

Tigre • Leone • Leopardo • Volpe • Elefante • Riccio • Ratto

### 140 Tartaruga

Tartaruga • Coccodrillo • Iguana • Rana • Serpente • Cobra • Vipera

#### 141 Orata

Orata • Spigola • Squalo • Foca • Balena • Tonno • Delfino

### 142 Farfalla

Farfalla • Ape • Vespa • Mosca • Formica • Zanzara • Ragno

### 143 Conchiglia

Conchiglia • Cozza • Vongola • Polpo • Seppia • Calamaro • Lumaca

### 14 | Piante

### 144 Fiore

Fiore • Rosa • Tulipano • Garofano • Giglio • Margherita • Viola

### 145 Albero

Albero • Quercia • Pino • Cipresso • Platano • Tiglio • Palma

### 15 | Natura e ambiente

### 146 Mare

Mare • Oceano • Arcipelago • Isola • Baia • Spiaggia • Onda

### 147 Montagna

Montagna • Ghiacciaio • Torrente • Traforo • Cima • Passo • Vulcano

### 148 Cielo

Cielo • Sole • Luna • Arcobaleno • Nuvola • Lampo • Tuono

### 16 | Giocare

#### 149 Gioco

Gioco • Videogioco • Palla • Bambola • Bocce • Scacchi • Carte

### 17 | Mestieri

### 150 Contadino

Contadino • Pescatore • Marinaio • Pescivendolo • Fornaio • Macellaio • Giardiniere

#### 151 Cuoco

Cuoco • Carpentiere • Calzolaio • Sarto • Parrucchiere • Gioielliere

### 152 Medico

Medico • Infermiera • Farmacista • Avvocato • Notaio • Giornalista • Professore

### 18 | Strumenti di lavoro

#### 153 Carta

Carta • Foglio • Busta • Colla • Cartella • Fotocopia • Clip

#### 154 Matita

Matita • Biro • Penna • Pennarello • Evidenziatore • Gomma • Temperino

### 19 | Universo

#### 155 Universo

Universo • Galassia • Via Lattea • Stella • Sole • Pianeta • Luna

#### 156 Terra

Terra • Mercurio • Venere • Marte • Giove • Saturno • Nettuno • Urano

### 20 | Chimica e materia

### 157 Idrogeno

Idrogeno • Litio • Carbonio • Nitrogeno • Ossigeno • Fosforo • Zolfo

#### 158 Minerale

Minerale • Cristallo • Marmo • Quarzo • Sabbia • Sasso • Pietra

### 159 Metallo

Metallo • Ferro • Ruggine • Acciaio • Alluminio • Rame • Piombo

## 21 | Stato e politica

### 160 Mondo

Mondo • Paese • Confine • Democrazia • Repubblica • Parlamento • Presidente

### 161 Regione

Regione • Provincia • Municipio • Comune • Sindaco • Consigliere • Ufficio

### 162 Costituzione

Costituzione • Giustizia • Legge • Tribunale • Giudice • Processo • Carcere

### 163 Truffa

Truffa • Inganno • Furto • Rapina • Narcotraffico • Omicidio • Prigione

### 164 Mondo

Mondo • Nazione • Indipendenza • Unione Europea • Diplomazia • Trattato Globalizzazione

### 165 Europa

Europa • Asia • America • Africa • Australia • Oceania • Antarctica

### 22 | Pace, guerra e militari

#### 166 Guerra

Guerra • Esercito • Militare • Aviazione • Marina • Soldato • Pace

### 23 | Economia

#### 167 Fattoria

Fattoria • Contadino • Prato • Erba • Falce • Fieno • Fienile

### 168 Campo

Campo • Grano • Paglia • Mulino • Vigna • Vite • Vendemmia

#### 169 Trattore

Trattore • Terreno • Aratro • Orto • Raccolto • Allevamento • Stalla

### 170 Barca da pesca

Barca da pesca • Gommone • Pescatore • Rete • Lenza • Canna da pesca • Amo

### 171 Cantiere

Cantiere • Pianta • Materiale • Cemento • Mattone • Vetro • Legno

### 172 Soldi

Soldi • Biglietto • Moneta • Banca • Euro • Dollaro • Renminbi

#### 173 Bancomat

Bancomat • Carta di credito • Codice PIN • Credito • Prelievo • Somma • Ricevuta

#### 174 Assicurazione

Assicurazione • Garanzia • Rischio • Contratto • Firma • Danno • Risarcimento

### 24 | Storia

#### 175 Storia

Storia • Antichità • Rinascimento • Povertà • Resistenza • Ribellione • Rivoluzione

## 25 | Filosofia e letteratura

### 176 Filosofia

Filosofia • Morale • Bene • Male • Pensiero • Ipotesi • Teoria

### 177 Libro

Libro • Romanzo • Copertina • Capitolo • Lettore • Lettrice • Libreria

## 26 | Musica

### 178 Pianoforte

Pianoforte • Violino • Violoncello • Chitarra • Batteria • Flauto • Tromba

## 27 | Arte figurativa

### 179 Arte

Arte • Statua • Affresco • Quadro • Disegno • Ritratto • Modello

# 10. Parole Italiane (2)

# 1 | Bisogni elementari

001 Mangiare

Mangiare

Bere

Lavare

Fare la pipì

Bagno

Doccia

Dormire

002 Ho freddo

Ho freddo.

Ho caldo.

Non posso.

Non voglio.

Non lo so.

Basta!

Sono stanca.

003 Vorrei mangiare

Vorrei mangiare.

Vorrei bere.

Vorrei andare in bagno.

Vorrei fare la pipì.

Vorrei lavarmi.

Vorrei fare una doccia.

Vorrei dormire.

# 2 | Comunicazione

004 Ciao

Ciao!

Salute!

Buongiorno.

Buonasera.

Buonanotte.

Come stai?

A presto.

### 005 Come sta

Come sta?

Tanti saluti!

Ci vediamo

Arrivederci.

A dopo.

A presto.

A domani.

006 Grazie

Grazie.

Grazie, e tu?

Grazie, e Lei?

Va bene.

Prego!

Siediti!

### 007 Accomodati

Accomodati!
Sedetevi!
Accomodatevi!
Gradite qualcosa?
Gradisci qualcosa?
Che cosa ti servo?

### 008 Vorrei uscire

Vorrei uscire.

Vorrei andare al mare.

Vorrei vedere Maria.

Vorrei fare la spesa.

Vorrei andare al bar.

Vorrei andare al ristorante.

Attento!

009 Vieni

Vieni!

Dimmi!

Fa vedere!

Fammi pensare!

Dammelo!

Ascolta!

Fallo!

010 Mangia

Mangia!

Bevi!

Lascialo!

Spostati!

Vestiti!

Vai!

Esci!

Torna presto!

# 011 Non farlo

Non farlo!
Non bere tanto!
Non mangiare tanto!
Non pensarci!
Non preoccuparti!
Non andare!
Non uscire adesso!

012 Grazie

Grazie.

Prego.

Che cos'è?

Ti piace?

Ti piacciono?

Perché?

Quando?

### 013 Permesso

Permesso!

Avanti!

Ben arrivati!

Accomodatevi!

Per favore!

Per piacere!

Per cortesia!

014 Scusa

Scusa.

Aiuto!

Mi dispiace.

Grazie mille.

Non fa niente.

Sono dispiaciuto.

Mi scusi.

Prego, favorisca, non faccia complimenti!

# 015 Buon appetito

Buon appetito!
Buon fine settimana!
Buon viaggio!
Buon compleanno!
Buona Pasqua!
Buon Natale!
Felice anno nuovo!

016 Davvero

Davvero?

Dai!

Sul serio?

Incredibile!

Pazzesco!

Ah sì?

Fantastico!

Non ci credo!

# Dimmi tutto!

017 Caspita

Caspita!

Che figata!

Ammazza!

Forte!

Come no!

Chissà?

Magari!

018 Ah

Ah!

Oh!

Ehi!

Mah!

Toh!

Beh?

Ahi!

Aiò!

# Eia!

019 Idea

Idea
Problema
Soluzione
Possibilità
Ragione
Difficoltà
Facilità

020 Sapere

Sapere

Pensare

Credere

Volere

Ragionare

Progettare

Decidere

021 Facile

Facile
Difficile
Possibile
Impossibile
Semplice
Complicato
Probabile

### 022 Domanda

Domanda

Risposta

Messaggio

Chiacchiere

Proposta

Racconto

Commento

023 Parlare

Parlare
Chiedere
Rispondere
Raccontare
Chiacchierare
Interrompere
Gridare

### 024 Auguri

Auguri! Un successo! Complimenti! Congratulazioni! Che peccato! Che dispiacere! Che disperazione! 025 Sì

Sì

No

Infatti

Esatto

Forse

Mai

Niente

026 Bene

Bene

Male

Buono

Cattivo

Contento

Scontento

**Imbecille** 

027 Meraviglioso

Meraviglioso
Splendido
Eccezionale
Affascinante
Eccellente
Straordinario
Impressionante

028 Meglio

Meglio

Peggio

Ottimo

Pessimo

Assurdo

Strano

Incredibile

029 Caotico

Caotico
Scorretto
Spaventoso
Sgradevole
Insopportabile
Penoso
Che schifo!

### 030 In bocca al lupo

In bocca al lupo!

Tocchiamo ferro!

È andata storta.

Non vedo l'ora di vederti.

Molto fumo e poco arrosto.

Lascia perdere!

Acqua in bocca!

### 031 Che cosa stai combinando

Che cosa stai combinando?

Giù le mani!

Dai, muoviti!

Ci mancherebbe altro!

Gliel'ho detto chiaro e tondo.

L'ho mandato al quel paese.

È rimasto a bocca aperta.

## 3 | Comunicazione esterna

032 Cellulare

Cellulare

**Tablet** 

Messaggino

Caricatore

Telefono

Numero

Ricarica

033 Accendere

Accendere

Chiamare

Squillare

Spegnere

Ricaricare

Chattare

Giocare

034 Computer

Computer Laptop Mouse Chiave USB Stampante **Joystick** Mail

035 Internet

Internet

**Browser** 

Account

Nome utente

**Password** 

Sito

Homepage

036 Scrivere

Scrivere

Lettera

Cartolina

Francobollo

Sportello

Posta

Inviare

037 TV

TV

Guardare

Telecomando

Telegiornale

Canale

Programma

Pubblicità

038 Giornale

Giornale

Quotidiano

Leggere

Articolo

Commentare

Situazione

Attuale

# 4 | Cibo

039 Acqua

Acqua

Caffè

Tè

Latte

Cioccolata

Succo di frutta

040 Champagne

Champagne

Vino rosso

Vino bianco

Birra

Spumante

Liquore

Cincin!

041 Pane

Pane

Panino

Farina

Pasta

Cornetto

Torta

**Biscotto** 

042 Patata

Patata

Purè

Patate fritte

Frittelle

Riso

Risotto

Arancino

043 Latte

Latte

Panna

Burro

Formaggio

Mozzarella

Ricotta

Yogurt

044 Pesce

Pesce

Tonno

Orata

Spigola

Sogliola

Sardina

Astice

045 Aragosta

Aragosta

Scampi

Gambero

Granchio

Calamaro

Seppia

Carne

046 Vitello

Vitello

Manzo

Maiale

Maialetto

Agnello

Capretto

Filetto

047 Cotoletta

Cotoletta

Bistecca

Scaloppina

Fegato

Rene

Cuore

Salsiccia

#### 048 Prosciutto

**Prosciutto** 

Bresaola

Salame

Mortadella

Pancetta

Guanciale

049 Verdura

Verdura

Insalata

Pomodoro

Carota

Cetriolo

Peperone

Melanzana

### 050 Zucchina

Zucchina Sedano Finocchio Cavolo Cavolfiore Broccoli Zucca

051 Lattuga

Lattuga

Scarola

Bietola

Cicoria

Belga

Radicchio

Spinaci

052 Rucola

Rucola

Fagioli

Lenticchie

Fave

Piselli

Ceci

Soia

053 Aglio

Aglio
Cipolla
Scalogno
Peperoncino
Basilico
Prezzemolo

#### 054 Frutta

Frutta

Macedonia

Arancia

Limone

Clementina

Mandarino

Pompelmo

055 Fragola

Fragola

Ciliegia

Albicocca

Melone

Pesca

Pescanoce

Anguria

056 Fico

Fico

Uva

Prugna

Castagna

Mela

Pera

Cachi

057 Melograno

Melograno

Banana

**Dattero** 

Cocco

Kiwi

Litchi

Ananas

058 Noce

Noce Nocciola Noccioline Mandorla Pinolo Pistacchio Noce del Brasile 059 Oliva

Oliva
Olio d'oliva
Olio di semi
Olio di palma

060 Gelato

Gelato

Cioccolatini

Zucchero

Miele

Marmellata

Dolce

Dessert

### 061 Prima colazione

Prima colazione

Spremuta

Fetta

Tazza

**Bicchiere** 

Bottiglia

Vassoio

062 Pranzo

Pranzo

Cena

Piatto

Cucchiaio

Forchetta

Coltello

Candela

063 Tovaglia

Tovaglia

Tovagliolo

Sale

Pepe

Olio

Aceto

Senape

064 Droga

Droga

Tabacco

Sigaretta

Alcol

Spinello

Eroina

Cocaina

# 5 | Corpo

065 Testa

Testa

Orecchio

Occhio

Dente

Gola

Schiena

Seno

066 Stomaco

Stomaco

Pancia

Spalla

Braccio

Mano

Gamba

Piede

067 Testa

Testa

Capelli

Cervello

Faccia

Orecchio

Occhio

Palpebra

068 Naso

Naso

Bocca

Labbro

Dente

Lingua

Gola

Collo

069 Braccio

Braccio

Gomito

Mano

Pugno

Gamba

Ginocchio

Piede

070 Cervello

Cervello

Cuore

Polmone

Stomaco

Fegato

Rene

Prostata

071 Andare

Andare

Venire

Correre

Saltare

Salire

Scendere

Cadere

072 Bello

Bello

Carino

Alto

Basso

Robusto

Snello

Normale

073 Biondo

Biondo

Bruno

Nero

Castano

Grigio

Calvo

Treccia

074 Acqua

Acqua Sapone Shampoo Asciugamano Fon Spazzola Pettine

075 Doccia

Doccia

Dentifricio

Spazzolino

Rasoio

Crema

Rossetto

**Profumo** 

### 6 | Persone

076 Nome

Nome

Cognome

Documento

Passaporto

Carta d'identità

**Patente** 

Carta di credito

#### 077 Come ti chiami

Come ti chiami?

Mi chiamo Mario.

Di dove sei?

Quanti anni hai?

Abito in Via Roma.

Hai fratelli e sorelle?

Dove lavori?

### 078 La mia casa

La mia casa Il tuo cane La sua gatta Il nostro appartamento La vostra macchina Il loro lavoro La mia vita

079 Uomo

Uomo

Donna

Marito

Moglie

Coppia

Figlio

Figlia

080 Babbo

Babbo

Mamma

Fratello

Sorella

Nonno

Nonna

Nipote

081 Famiglia

Famiglia

Genitori

Nonni

Suoceri

Cugini

Zio

Zia

082 Amico

Amico

Amica

Vicino

Vicina

Collega

Gruppo

Gente

### 083 Amicizia

Amicizia

Appuntamento

Salutare

Baciare

Abbracciare

Toccare

Invitare

#### 084 Natale

Natale San Silvestro Capodanno Pasqua Pasquetta Carnevale Befana

085 Compleanno

Compleanno
Annuncio
Matrimonio
Gravidanza
Nascita
Separazione
Divorzio

## 7 | Abbigliamento

086 Pigiama

Pigiama Camicia da notte Mutanda Reggiseno Maglia Biancheria Costume da bagno 087 Camicia

Camicia

Camicetta

Jeans

Pantaloni

Gonna

Maglione

Giacca

088 Scarpe

Scarpe

Stivali

Sandali

Cuoio

Cappotto

Impermeabile

Cappello

089 Macchia

Macchia

Sporco

Lavare

Sapone

Detersivo

Lavatrice

Ferro da stiro

090 Foulard

Foulard

Cintura

Borsa

Guanti

Occhiali da sole

**Ombrello** 

Cravatta

091 Gioiello

Gioiello

Catena

Braccialetto

Orecchino

Perla

Anello

Oro

## 8 | Sentimenti e carattere

092 Amore

Amore

Felicità

Gioia

Simpatia

Stima

Comprensione

Nostalgia

093 Buono

Buono

Gentile

Romantico

Generoso

Coraggioso

Bravo

Forte

094 Scherzare

Scherzare

Sorridere

Sorprendere

Esitare

Sbagliare

Tremare

Piangere

# 9 | Concetti astratti

095 Tempo

Tempo

**Passato** 

Presente

**Futuro** 

Inizio

Pausa

Fine

096 Aspettare

Aspettare

Cominciare

Finire

Breve

Lungo

Primo

Ultimo

097 Prima

Prima

Adesso

Subito

Dopo

Presto

Tardi

Ancora

#### 098 Sono le dieci

Sono le dieci.

È mezzogiorno.

È l'una.

Sono le due.

Sono le tre meno un quarto.

Sono le quattro e un quarto.

Sono le cinque e mezzo.

### 099 Sono le sei e venti

## Sono le sei e venti.

100 Lunedì

Lunedì

Martedì

Mercoledì

Giovedì

Venerdì

Sabato

## 101 Domenica

Domenica

Giorno

Settimana

L'altro ieri

Ieri

Oggi

Domani

Dopodomani

#### 102 Gennaio

Gennaio

Febbraio

Marzo

Aprile

Maggio

Giugno

Luglio

Agosto

Settembre

Ottobre

Novembre

Dicembre

103 Anno

Anno

Mese

Stagione

Primavera

Estate

Autunno

Inverno

104 Dove

Dove?

Qui

Lì

Su

Giù

Dentro

Fuori

105 Sotto

Sotto

Sopra

A destra

A sinistra

Davanti

Dietro

Ecco!

106 Colore

Colore

Chiaro

Scuro

Bianco

Nero

Blu

Azzurro

107 Rosso

Rosso

Giallo

Verde

Arancione

Viola

Rosa

Grigio

108 Zero

Zero

Uno

Due

Tre

Quattro

Cinque

Sei

Sette

Otto

Nove

Dieci

109 Undici

Undici

Dodici

Tredici

Quattordici

Quindici

Diciassette

Diciotto

Diciannove

# Venti

#### 110 Ventuno

Ventuno

Ventidue

Ventitré

Ventiquattro

Venticinque

Ventisei

Ventisette

Ventotto

# Ventinove

## 111 Trenta

Trenta

Quaranta

Cinquanta

Sessanta

Settanta

Ottanta

Novanta

#### 112 Cento

Cento

Duecento

Trecento

Quattrocento

Cinquecento

Seicento

Settecento

Ottocento

## Novecento

#### 113 Mille

Mille
Millecento
Duemila
Duemiladiciotto
Diecimila
Milione
Miliardo

114 Grande

Grande

Piccolo

Pieno

Vuoto

Molto

Poco

Semplice

## 115 Chilometro

Chilometro

Metro

Centimetro

Millimetro

Altezza

Lunghezza

Larghezza

# 10 | Casa

116 Porta

Porta

Serratura

Chiave

Maniglia

Ingresso

Corridoio

Stanza

117 Soggiorno

Soggiorno

Cucina

Bagno

Scala

Camera da letto

Camera degli ospiti

Studio

#### 118 Pavimento

Pavimento

Parete

Soffitto

Finestra

Persiana

Terrazza

Ringhiera

## 119 Rubinetto

Rubinetto

Acqua

Bagno

Bidè

Vasca da bagno

Gabinetto

**Toilette** 

120 Lampadina

Lampadina

Corrente

Presa

Spina

Interruttore

Elettricità

**Impianto** 

## 11 | Stanze

121 Frigorifero

Frigorifero
Fornello
Forno
Lavastoviglie
Pattumiera
Macchina del caffè
Radio

### 122 Pentola

Pentola
Coperchio
Scolapasta
Grattugia
Tegame
Padella
Teglia

123 Tavola

Tavola

Sedia

Tovaglia

Caraffa

Tovagliolo

Cassettone

Tenda

124 Divano

Divano

Poltrona

**Tappeto** 

Televisore

**Tavolino** 

Cassetto

Vaso

#### 125 Letto

Letto

Materasso

Lenzuolo

Guanciale

Coperta

Armadio

126 Water

Water
Carta igienica
Doccia
Vasca
Asciugamano
Lavandino
Specchio

## 12 | Negozi e commerci

127 Capitale

Capitale

Città

Quartiere

Porto

Centro

Periferia

Villaggio

128 Via

Via

Strada

Marciapiede

Piazza

Ponte

Parco

Stadio

#### 129 Macchina

Macchina

Motore

Ruota

Targa

Faro

Portiera

Finestrino

### 130 Autostrada

Autostrada
Traffico
Semaforo
Stop
Vigile
Incidente
Ambulanza

131 Aereo

Aereo

Aeroporto

Volo

Pilota

Hostess

Decollo

Atterraggio

132 Treno

Treno
Locomotiva
Vagone
Finestrino
Stazione
Marciapiede
Dogana

### 133 Imbarcare

**Imbarcare** 

Nave

Traghetto

Passeggero

**Biglietto** 

Cabina

Sbarcare

#### 134 Frutta e verdura

Frutta e verdura
Panificio

Macelleria

Mercato

Supermercato

Edicola

Posta

Banca

## 13 | Animali

135 Animali

Animali

Gregge

Femmina

Maschio

Coda

Muso

Zampa

136 Maiale

Maiale

Vitello

Mucca

Cane

Gatto

Capra

Pecora

137 Cavallo

Cavallo

Asino

Bue

Toro

Gallo

Coniglio

Cammello

138 Scimpanzé

Scimpanzé

Gorilla

Orangutan

Scimmia

Lupo

Orso

Topo

233

139 Tigre

Tigre

Leone

Leopardo

Volpe

Elefante

Riccio

Ratto

140 Tartaruga

Tartaruga

Coccodrillo

Iguana

Rana

Serpente

Cobra

Vipera

141 Orata

Orata

Spigola

Squalo

Foca

Balena

Tonno

Delfino

142 Farfalla

Farfalla

Ape

Vespa

Mosca

Formica

Zanzara

Ragno

### 143 Conchiglia

Conchiglia

Cozza

Vongola

Polpo

Seppia

Calamaro

Lumaca

## 14 | Piante

144 Fiore

Fiore

Rosa

Tulipano

Garofano

Giglio

Margherita

Viola

145 Albero

Albero

Quercia

Pino

Cipresso

Platano

**Tiglio** 

Palma

# 15 | Natura e ambiente

146 Mare

Mare

Oceano

Arcipelago

Isola

Baia

Spiaggia

Onda

### 147 Montagna

Montagna

Ghiacciaio

**Torrente** 

Traforo

Cima

Passo

Vulcano

148 Cielo

Cielo

Sole

Luna

Arcobaleno

Nuvola

Lampo

Tuono

### 16 | Giocare

149 Gioco

Gioco

Videogioco

Palla

Bambola

Bocce

Scacchi

Carte

### 17 | Mestieri

150 Contadino

Contadino

Pescatore

Marinaio

Pescivendolo

Fornaio

Macellaio

Giardiniere

#### 151 Cuoco

Cuoco
Carpentiere
Calzolaio
Sarto
Parrucchiere
Gioielliere

### 152 Medico

Medico
Infermiera
Farmacista
Avvocato
Notaio
Giornalista
Professore

# 18 | Strumenti di lavoro

153 Carta

Carta

Foglio

Busta

Colla

Cartella

Fotocopia

Clip

154 Matita

Matita

Biro

Penna

Pennarello

Evidenziatore

Gomma

Temperino

## 19 | Universo

155 Universo

Universo

Galassia

Via Lattea

Stella

Sole

Pianeta

Luna

156 Terra

Terra

Mercurio

Venere

Marte

Giove

Saturno

Nettuno

Urano

## 20 | Chimica e materia

157 Idrogeno

Idrogeno

Litio

Carbonio

Nitrogeno

Ossigeno

Fosforo

Zolfo

158 Minerale

Minerale

Cristallo

Marmo

Quarzo

Sabbia

Sasso

Pietra

159 Metallo

Metallo

Ferro

Ruggine

Acciaio

Alluminio

Rame

Piombo

### 21 | Stato e politica

160 Mondo

Mondo

Paese

Confine

Democrazia

Repubblica

Parlamento

Presidente

### 161 Regione

Regione Provincia Municipio Comune Sindaco Consigliere Ufficio

#### 162 Costituzione

Costituzione

Giustizia

Legge

Tribunale

Giudice

**Processo** 

Carcere

163 Truffa

Truffa

Inganno

**Furto** 

Rapina

Narcotraffico

Omicidio

Prigione

164 Mondo

Mondo
Nazione
Indipendenza
Unione Europea
Diplomazia
Trattato
Globalizzazione

165 Europa

Europa

Asia

America

Africa

Australia

Oceania

Antarctica

## 22 | Pace, guerra e militari

166 Guerra

Guerra

Esercito

Militare

Aviazione

Marina

Soldato

Pace

### 23 | Economia

167 Fattoria

Fattoria

Contadino

Prato

Erba

Falce

Fieno

Fienile

**168** *Campo* 

Campo

Grano

Paglia

Mulino

Vigna

Vite

Vendemmia

169 Trattore

**Trattore** 

Terreno

Aratro

Orto

Raccolto

Allevamento

Stalla

170 Barca da pesca

Barca da pesca

Gommone

Pescatore

Rete

Lenza

Canna da pesca

Amo

#### 171 Cantiere

Cantiere

Pianta

Materiale

Cemento

Mattone

Vetro

Legno

172 Soldi

Soldi

**Biglietto** 

Moneta

Banca

Euro

Dollaro

Renminbi

#### 173 Bancomat

Bancomat

Carta di credito

Codice PIN

Credito

Prelievo

Somma

Ricevuta

#### 174 Assicurazione

Assicurazione

Garanzia

Rischio

Contratto

Firma

Danno

Risarcimento

### 24 | Storia

175 Storia

Storia

Antichità

Rinascimento

Povertà

Resistenza

Ribellione

Rivoluzione

### 25 | Filosofia e letteratura

176 Filosofia

Filosofia

Morale

Bene

Male

Pensiero

**Ipotesi** 

Teoria

#### 177 Libro

Libro

Romanzo

Copertina

Capitolo

Lettore

Lettrice

Libreria

### 26 | Musica

178 Pianoforte

Pianoforte

Violino

Violoncello

Chitarra

Batteria

Flauto

Tromba

### 27 | Arte figurativa

179 Arte

Arte

Statua

Affresco

Quadro

Disegno

Ritratto

Modello

#### Notes

#### **Notes**



Bernd Sebastian Kamps Monica Limoncino Maurizio Melis

# **OLIENA** {2018~1}

Language recovery after stroke

Every year, almost 20 million people suffer a first-time stroke and about a third of them have aphasia. Although aphasia often resolves spontaneously, many patients have persistent language disturbances.

A conservative estimate of the number of people who need acute post-stroke speech therapy is one to two million each year (China: 200,000, Europe: 100,000, US: 50,000).

The free OLIENA app displays videos of a person pronouncing words or short sentences. Each video is played in a loop until the patient proceeds to the next word. We recommend daily use of at least 30 minutes (better: 60 to 90 minutes!) and, according to personal need and time availability, continuous training for months or years.



