Please answer the following questions by stating Yes/No:

1) Does the following equation hold correct?

$$6\ CO_2 + 6\ H_2O \xrightarrow{\text{sunlight, chlorophyll}} 6\ O_2 + C_6H_{12}O_6\ (\text{glucose})$$
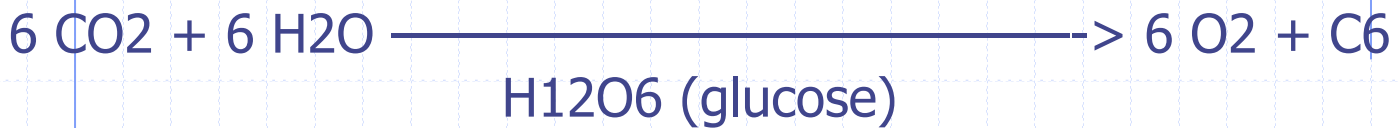
2) Are all plants photosynthetic?

3) Are all plants land organisms?

4) Do all seeds have one or two cotyledons?

5) Penguins and turtles are amphibians because they are both in and out of water.

6) Can all plants undergo pollination?

7) Is pollination and fertilization one and the same?

8) Do plants respire only at night?

9) Are shoots only positively phototropic?

10) Whales, jellyfish, and starfish are all fish.

11) When things dissolve they "disappear."

12) Melting and dissolving are the same.

13) You can see and hear a distinct event at the same moment.

14) A mirror reverses everything.

15) Particles of solids have not motions.

Classroom Learning Environment (CLE)

* How is our classroom? Does it help us to learn?
* How are the lessons? Do they encourage us to learn?
* How is the teacher? Does he/she motivate us to learn?
* Let's think about our learning environment. Is it positive or negative?
* **Y** = Yes; **M** = Maybe; **N** = No; **?** = No opinion (We've never thought about this before.)

Our learning environment ...	Y	M	N	?
1. encourages us to be active.				
2. encourages us to discover our own ideas.				
3. emphasizes the personal nature of learning.				
4. encourages differences as good and desirable.				
5. recognizes our right to make mistakes.				
6. tolerates ambiguity (allows for contradictions).				
7. views evaluation as cooperative and personal.				
8. encourages openness of self.				
9. encourages us to trust ourselves.				
10. is one in which we feel respected.				
11. is one in which we feel accepted.				
12. permits confrontation.				
13. allows the teacher to lose the teaching function.				
14. attempts to meet individual needs and abilities.				
15. provides meaningful learning materials.				
16. promotes personal interests and exploration.				
17. provides materials that need interaction.				
18. does not promote competitiveness.				
19. allows us to make mistakes and still feel OK.				
20. helps us grow socially, emotionally, intellectually.				
21. nurtures respect, and trust for one another.				
22. views the teacher's role as facilitator.				

Multiple Intelligences Survey (MIS) (1)

We all possess a mixture of different types of intelligences: Naturalist; Musical; Logical; Existential; Interpersonal; Kinesthetic; Verbal; Intrapersonal; and Visual.
- ★ Everyone has all the intelligences!
- ★ You can strengthen an intelligence!
- ★ This inventory shows you a picture of your MIs now – it can change!
- ★ MIS is meant to help people to learn effectively, not to categorize them!

Complete each section by writing a "1" next to each statement you think accurately describes you. If you do not agree with a statement, leave the space blank. Then add the "1"s in each section, to make a total for each section.

MI Survey, Section 1

_____ I enjoy categorizing things by common traits.
_____ Ecological issues are important to me.
_____ Hiking and camping are enjoyable activities.
_____ I enjoy working on a garden (gardening).
_____ I believe that preserving our National Parks is important.
_____ Putting things in hierarchies makes sense to me.
_____ Animals are important in my life.
_____ My home has a recycling system in place.
_____ I enjoy studying biology, botany and/or zoology.
_____ I spend a great deal of time outdoors.

> TOTAL for
>
> Section 1 _____

MI Survey, Section 2

_____ I easily recognize patterns.
_____ I focus in on noise and sounds.
_____ Moving to a beat is easy for me.
_____ I've always been interested in playing an instrument.
_____ The cadence and rhythm of poetry intrigues me.
_____ I remember things by putting them in a rhyme.
_____ Concentration is difficult while listening to a radio or television.
_____ I enjoy many kinds of music.
_____ Musicals are more interesting than dramatic plays.
_____ Remembering song lyrics is easy for me.

> TOTAL for
>
> Section 2 _____

MI Survey, Section 3

_____ I keep my things neat and orderly.
_____ Step-by-step directions are a big help.
_____ Solving problems comes easily to me.
_____ I get easily frustrated with disorganized people.
_____ I can complete calculations quickly in my head.
_____ Puzzles requiring reasoning are fun.
_____ I can't begin an assignment until all my questions are answered.
_____ Structure helps me be successful.
_____ I find working on a computer spreadsheet or database rewarding.
_____ Things have to make sense to me or I am dissatisfied.

> TOTAL for
>
> Section 3 _____

Self-Assessment: Participation

Participation in learning is very important:
- It helps us to focus on learning content and meaning.
- It helps us to concentrate and understand.
- It encourages us to interact (communicate) with others.
- It promotes confidence, motivation and positive attitudes.
- It helps us to use the target language in real situations.

My Class-Participation Profile:	Always ...... Never				
1. I prepare for class by reading about the lesson content.	5	4	3	2	1
2. I come to class early, so that I am ready to start on time.	5	4	3	2	1
3. I speak in English whenever I can.	5	4	3	2	1
4. I listen carefully to my group members.	5	4	3	2	1
5. I offer creative ideas to my group.	5	4	3	2	1
6. I participate in all the activities.	5	4	3	2	1
7. I ask the teacher for help when necessary.	5	4	3	2	1
8. Whatever the situation, I do my best.	5	4	3	2	1
9. I use critical thinking and problem-solving strategies.	5	4	3	2	1
10. I think about the class ("What am I learning?").	5	4	3	2	1
11. I think about my learning ("How am I doing?").	5	4	3	2	1
12. I do the homework and out-of-class assignments.	5	4	3	2	1
13. I review the lesson to reinforce my learning.	5	4	3	2	1
Total					

1. Circle the number that matches you.
2. Add the numbers to make a total. What is your score?
3. Take some time to think about your participation:
   - *What do I want to achieve?*
   - *What are my learning needs?*
   - *How can I learn most effectively?*

Self-Assessment: Confidence

A positive self-image is very important.
- It helps us to focus on learning and meaning.
- It gives us strength to concentrate and understand.
- It encourages us to interact (communicate) with others.
- It promotes motivation and positive attitudes.
- It helps us to use the target language in real situations.

My Self-Confidence Profile:	No		Maybe		Yes
1. I have the ability to learn English.	1	2	3	4	5
2. If I do my best, I will achieve my learning goals.	1	2	3	4	5
3. I will improve if I continue to study.	1	2	3	4	5
4. I like to speak in English in class.	1	2	3	4	5
5. Trying to speak English is more important than accuracy.	1	2	3	4	5
6. I like to study with my group members in class.	1	2	3	4	5
7. My contribution is as important as anyone else's.	1	2	3	4	5
8. I participate in all the activities in class.	1	2	3	4	5
9. I participate even if I am embarrassed or nervous.	1	2	3	4	5
10. I ask the teacher for help when needed.	1	2	3	4	5
11. I do my best, whatever the situation.	1	2	3	4	5
12. I keep trying to learn, even if I am nervous.	1	2	3	4	5
13. It is OK to make mistakes when trying new language.	1	2	3	4	5
14. If I have a problem, I am afraid to ask for help.	5	4	3	2	1
15. I worry about what other students think of my efforts.	5	4	3	2	1
16. I worry about what the teacher thinks of my efforts.	5	4	3	2	1
17. I believe in myself.	1	2	3	4	5
18. I trust my feelings and emotions	1	2	3	4	5
19. I think about my learning ("How am I doing?").	1	2	3	4	5
20. I am a good language-learner.	1	2	3	4	5
TOTAL / 100					

1. Circle the numbers for the answers that match you.
2. Add the numbers to make a total.
3. Think about your self-image:
   - *Do I respect myself?*
   - *Do I believe in my abilities?*
   - *Do I worry about what people think of me?*
   - *Do I trust myself to achieve my goals?*

Checklists/inventories
Observation checklist

Type of error	Treated by the teacher	Not treated
Content Grammatical Phonological Discourse Lexical		
Totals		

Checklist of teacher-classroom-language

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
OK.														
Right then.														
Good job.														
Well done.														
Listen to me.														
Look at me.														
Stop what you're doing.														

Timeline of lesson interactions
"T" = teacher-talk; "S" = student-talk. 50-minute lesson.♪

	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
T																									
S																									

Interviews

Pre- and post-course interview questions:

Interviewer: Thank you for participating in this research. We are interested in your opinions, so there are no correct or incorrect answers. Please answer the questions in whatever way feels best for you.	
1	How do you feel about your Science proficiency level and your language skills (speaking, listening, reading, writing)?
3	How do you feel about taking tests?
5	How do you feel about your confidence as a learner?
6	How do you feel about your motivation as a learner?
7	How do you feel about your independence as a learner? (autonomy)
8	How do you feel about taking part in this research? Do you have any comments?
9	(2nd interview session) Do you feel that peer-evaluation has affected your learning and study methods in any way?
10	(2nd interview session) Do you feel that peer-evaluation helped you in taking the final proficiency test?

Sample issues: for action research:

- How much time do I spend talking in the classroom?
- How do I correct errors?
- How much feedback do I give to the learners?
- How do I provide this feedback?
- How much time do I allow for my learners to interact with each other?
- How much of my lessons do I spend in teacher-fronted activities?
- How can I improve my classroom management skills?
- How much attention do I give to individual learners?
- How certain tasks promote collaborative work
- How learners carry out the same task in different ways
- How difficult some learners find certain types of test
- How certain classroom materials work better than others
- How learners are better motivated in some classes than in others.

Teachers' Needs

- What does a teacher *need* for **this action research project** ?
- Talk about this topic with your group members. Draw a circle around the number that matches your opinion:
  1 = I agree strongly. 2 = I agree. 3 = I have no opinion.
  4 = I disagree.   5 = I disagree strongly.
- Remember – there are no correct or incorrect answers.
- How about making a survey of all the members in this class? How about making a survey of all the members of another class?

Fen grass

Teachers' Professional Needs:	Opinions
1. Teachers need to be experts in their field of learning.	1 2 3 4 5
2. Teachers need to be experts in educational methodology.	1 2 3 4 5
3. Teachers need to keep up with new methods of teaching.	1 2 3 4 5
4. Teachers need to know about the psychology of learning.	1 2 3 4 5
5. Teachers need to be enthusiastic about their subject.	1 2 3 4 5
6. Teachers need to be energetic.	1 2 3 4 5
7. Teachers need to be patient.	1 2 3 4 5
8. Teachers need to enjoy teaching.	1 2 3 4 5
9. Teachers need to know how effective their teaching is.	1 2 3 4 5
10. Teachers need to reflect on their teaching.	1 2 3 4 5
11. Teachers need feedback from the students.	1 2 3 4 5
12. Teachers need feedback from other teachers.	1 2 3 4 5
13. Teachers need to give clear explanations.	1 2 3 4 5
14. Teachers need to be organized.	1 2 3 4 5
15. Teachers need to develop a wide repertory of teaching skills.	1 2 3 4 5
16. Teachers need further training.	1 2 3 4 5
17. Teachers need time to prepare teaching materials.	1 2 3 4 5
18. Teachers need to do research.	1 2 3 4 5
19. Teachers need to respect their students.	1 2 3 4 5
20. Teachers need to be respected by students.	1 2 3 4 5
21. Inexperienced teachers need to have reduced workloads.	1 2 3 4 5
22. Inexperienced teachers need to work with experienced staff.	1 2 3 4 5
23. Teachers need to understand students.	1 2 3 4 5
24. Teachers need to be honest with students.	1 2 3 4 5
25. Teachers need to help the students to be confident.	1 2 3 4 5
26. Teachers need to stimulate intellectual curiosity in students.	1 2 3 4 5
27. Teachers need to encourage independent thought in students.	1 2 3 4 5
28. Teachers need to use logical arguments instead of authority.	1 2 3 4 5
29. Teachers need to adjust teaching methods to individual students.	1 2 3 4 5